

DOCUMENT RESUME

ED 037 862

EC 005 265

TITLE Special Education: Program of Studies for Senior High School, Core IV.

INSTITUTION Forsyth County - Winston-Salem City Schools, N.C.

PUB DATE 68

NOTE 152p.

EDRS PRICE EDRS Price MF-\$0.75 HC-\$7.70

DESCRIPTORS Art, Business Education, Clothing Instruction, \*Curriculum Guides, \*Educable Mentally Handicapped, \*Exceptional Child Education, Graphic Arts, Handicrafts, Homemaking Education, Language Arts, Mathematics Education, \*Mentally Handicapped, Nurses Aides, Power Mechanics, Prevocational Education, Reading, Secondary School Students, Shop Curriculum, Typewriting, \*Vocational Education

ABSTRACT

A curriculum guide for senior high school educable retarded pupils, based on activities undertaken during the first 2 years of the special program, is oriented toward job training and preparation. Purposes, course structure, and objectives are given for each of the following areas of study: arts and crafts, binding, business practice, driver education, foods and related services, graphic arts, language arts, mathematics, mechanical drawing, nurse's aide, power mechanics, reading, sewing and clothing instruction, shop, social competence, and typing. Lists of references and films are provided. (RJ)

# **SPECIAL EDUCATION**

**ED 037862**

**WINSTON-SALEM / FORSYTH COUNTY SCHOOLS**

## **Program Of Studies For Senior High School**

**CORE IV**

ED 037862

SPECIAL EDUCATION  
PROGRAM OF STUDIES  
FOR  
SENIOR HIGH SCHOOL  
CORE IV

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY.

WINSTON-SALEM/FORSYTH COUNTY SCHOOLS  
WINSTON-SALEM, NORTH CAROLINA

1968

WINSTON-SALEM/FORSYTH COUNTY SCHOOLS

Winston-Salem, North Carolina

MARVIN WARD

Superintendent of Schools

RAYMOND SARBAUGH

Associate Superintendent of Instruction

C. DOUGLAS CARTER

Director of Curriculum Planning and Special Services

MARY ELLEN GIBBS

Coordinator of Special Education

A. BUFORD CAUDLE

Supervisor of Special Education Rehabilitation Unit

HAROLD J. POPE

Principal, Central School

## FOREWORD

This curriculum guide for the Winston-Salem/Forsyth County teachers of the Senior High School Educable Mentally Retarded pupils represents an effort by the teachers of these classes at the Central Education and Rehabilitation Center to outline what is being done in their respective fields during the two experimental developmental years since the program was initiated. Because their work is still in the developmental stage, this guide is bound in loose leaf form so that additions and deletions may be made continuously, until the full three-or four-year program has been completed.

The faculty of the Central Education and Rehabilitation Center is attempting to develop a program of study at the secondary level that will build on to the program at the lower levels; be practical; meet the needs of the students in their own community; and expand their experiences so that they can adapt to an environment outside the school and their own community. The ultimate goal is to help pupils develop the attitudes and personality traits and give them the job training that will equip them to become self-supporting, productive members of society. The entire program at this level is job oriented. It is a cooperative program of Vocational Rehabilitation and Special Education in the Winston-Salem/Forsyth County Schools.

The instructional staff, who prepared this guide, is assisted by non-teaching personnel, who handle the counseling, evaluation of work experience, job placement, the securing of vocational rehabilitation services, testing, and on-the job training.



Raymond Sarbaugh  
Associate Superintendent

## ACKNOWLEDGEMENTS

Acknowledgements are made to the following teachers who prepared the outline for that portion of the curriculum for which they are responsible:

Richard Lee Beatty, Arts and Crafts  
Robert L. Conner, Mechanical Drawing  
Mrs. Betty Cutright, Business Practice  
Mrs. Frances Hoover, Social Competence  
Mrs. Judy Jennings, Nurse's Aide  
Woodrow Jennings, Driver Education  
Mrs. Billie Jones, Sewing and Clothing Construction  
Mrs. Ruth Laney, Reading  
Mrs. Miriam Loftin, Mathematics  
Wade McIver, Language Arts  
Frederick Patterson, Power Mechanics  
Mrs. Gilda Roumillat, Typing  
Mrs. Cornelia Simmons, Binding  
Gary Sink, Graphic Arts  
Daniel Wallace, Shop  
Mrs. Joanne Wilhelm, Foods and Related Services

Appreciation is also due to C. Douglas Carter, Director of Special Services and Curriculum Planning; Harold J. Pope, Director of the program, and members of the State Department of Public Instruction who helped in the initiation and planning of the program; and to Mary Ellen Gibbs, Coordinator of Special Education, who coordinated the writing and editing of this guide. A word of gratitude must also be expressed to all the non-teaching personnel at the Center and to the interested community agencies without whom such a training program could not be implemented.

## CONTENTS

In order to make the use of this guide as flexible as possible, the subjects are arranged in alphabetical order. Each subject is numbered separately with the initial letter or letters following the number.

Foreword . . . . .	i
Acknowledgements . . . . .	ii
Contents . . . . .	iii
Arts and Crafts . . . . .	1 AC - 12 AC
Binding . . . . .	1 Bi - 4 Bi
Business Practice . . . . .	1 BP - 7 BP
Driver Education . . . . .	1 DE - 8 DE
Foods and Related Services . . . . .	1 FRS - 6 FRS
Graphic Arts . . . . .	1 GA - 38 GA
Language Arts . . . . .	1 LA - 6 LA
Mathematics . . . . .	1 Ma - 10 Ma
Mechanical Drawing . . . . .	1 MD - 6 MD
Nurse's Aide . . . . .	1 NA - 5 NA
Power Mechanics . . . . .	1 PM - 10 PM
Reading . . . . .	1 Re - 5 Re
Sewing and Clothing Construction . . . . .	1 SCC - 11 SCC
Shop . . . . .	1 Sh - 4 Sh
Social Competence . . . . .	1 SC - 6 SC
Typing . . . . .	1 Ty - 8 Ty

## ARTS AND CRAFTS

### PURPOSE OF ARTS AND CRAFTS

The scope of the curriculum must be based on the needs, interests and abilities of the exceptional child. It must provide experiences to promote his growth and maturation and help him with his problems of adjustment.

Since art is an integral part of man's life, it must be a part of the total learning experience for the exceptional child. Through various media he can express himself in terms of useable and beautiful objects, not only for his own use, but also for economic security.

### STRUCTURE OF ARTS AND CRAFTS

Arts and Crafts I and Arts and Crafts II are specifically meant to introduce the basic foundations from which to build an understanding of arts and crafts.

On the other hand, Arts and Crafts III is based on the premise that the students have acquired the necessary skills in Arts and Crafts I and Arts and Crafts II to be advanced to Arts and Crafts III. In Arts and Crafts III the students are encouraged to select two areas in which they are interested for a concentrated study. Through this choice they can acquire the basic skills and experience necessary for avocational and/or avocational outlet.

### OBJECTIVES

- To teach the child that art is an expression of what one thinks, sees, and feels
- To reveal the child's personality and originality in art expression and in utilizing materials
- To indicate in conversation and in work the habit of seeking and finding art application in many activities
- To improve skills in handling a variety of tools and materials
- To appreciate the work of artists - painters, sculptors, architects, craftsmen, industrial artists and commercial artists as related to one's own life
- To develop procedures, habits and attitudes conducive to original expression

- To interest the student in art as a hobby for leisure time or avocational outlet
- To become interested in art expression of others in peer groups
- To develop manual skills
- To improve hand-eye coordination

## COURSE CONTENT

### ARTS AND CRAFTS I AND ARTS AND CRAFTS II

#### PRINTING PROCESSES

- Objectives
  - To gain a working knowledge of the tools and media
  - To enjoy the technique, then become more proficient and creative in expressing ideas
- Possible projects
  - Cardboard prints
  - Vegetable prints
  - Linoleum prints
  - Woodcuts
  - Plastercuts
  - Intaglie
  - Silk screen (serigraphy)
  - Found object prints
  - Monoprints
  - Paraffin block prints

#### DECOUPAGE

- Objectives
  - To develop increased sensitivity to the principles of good design
  - To show an increased awareness of feeling for beauty in a different material
  - To recognize achievement in the carry-over of design experience of other art work
- Possible Projects
  - Collage
  - Boxes
  - Glass
  - Furniture

#### PAINTING

- Objectives
  - To lead to an appreciation for the work of notable artists
  - To increase the awareness of the visual worlds around student
  - To increase pupil's ability to use painting tools and media with satisfactory results

- Possible Projects

- Tempera
- Watercolor
- Tempera batik
- Oil
- Mixed media

## CERAMICS

- Objectives

- To learn that clay is a basic material in everyday objects
- To realize that structure, form, and design are adaptable and suited to clay
- To develop an awareness that the decoration is determined by the use of the object and the possible means of carving, modeling and glazing

- Possible Projects

- Pottery
- Sculpture
- Jewelry
- Screens
- Plaques
- Mixed-media

## WEAVING

- Objectives

- To gain a working knowledge of the media and tools
- To develop the skill of weaving
- To gain an appreciation for textiles

- Possible Projects

- Hand loom weaving
- Spool knitting
- Knitting
- Loom weaving
- "Re-weaving"
- Egyptian card weaving
- Macrame

## DRAWING

- Objectives

- To gain ability in using lines effectively
- To gain muscular control in handling drawing tools and media
- To gain some understanding of the physical structure of the world in student's environment

- Possible Projects
  - Charcoal drawings
  - Pen and ink drawings
  - Brush and ink drawings
  - Crayon drawings
  - Pastel drawing
  - Crayon resist

## MOSAICS

- Objectives
  - To gain some appreciation of the history of mosaics
  - To show skill in the selection of shapes, sizes and color
  - To develop a feeling for the type of design that is appropriate to the art
- Possible Projects
  - Plaque
  - Tray
  - Screen
  - Table top
  - Tiles

## SCULPTURE

- Objectives
  - To know the limitations of the materials used
  - To learn resourcefulness of materials
  - To recognize the elements of good design
  - To develop an appreciation of sculpture
- Possible Projects
  - Wire sculpture
  - Metal sculpture
  - Cardboard sculpture
  - Wood sculpture
  - Bas-relief
  - Papier-mache
  - Mobiles
  - Sand casting
  - Embossed metal
  - Vermiculite and plaster sculpture
  - Toothpick sculpture

## LETTERING

- Objectives
  - To letter legibly and neatly
  - To use upper and lower case letters appropriately
  - To use good proportions in letter forms and background spaces

- Possible Projects
  - Freehand lettering
  - Stencil lettering
  - Cutout lettering

## POSTERMAKING

- Objectives
  - To learn to make effective, well organized posters
  - To develop an idea of what is necessary to sell an idea, a cause, or a product
  - To develop neat and careful workmanship
- Possible Projects
  - Travel posters
  - Slogans or mottoes
  - Events
  - Bulletin board displays

## STENCILING

- Objectives
  - To learn to plan and carry out original design in a sensitive manner in color, form and application
  - To have experience with a variety of techniques appropriate to stenciling on material, paper, and wood
- Possible Projects
  - Silk screen
  - Paper stencils
  - Batik

## ENAMELING

- Objectives
  - To acquire a working knowledge of the media and an appreciation for its properties
  - To gain a knowledge of different kinds of enamels and their uses
  - To better understand the professional enamelist
- Possible Projects
  - Bowls
  - Ashtrays
  - Jewelry
  - Plaques
  - Sculpture

## BASKETRY

- Objectives
  - To appreciate a functional object which is well designed and constructed
  - To have an experimental attitude toward this media and the ability to handle it in a functional way
- Possible Projects
  - Baskets of materials gathered by students
  - Matts for various purposes
  - Baskets of commercial reed, rattan or raffia

## STITCHERY

- Objectives
  - To help the students gain knowledge of basic design qualities
  - To awaken student to the realization of art heritage in this area of art expression
  - To challenge the imagination and satisfy the urge to create with stitchery materials
- Possible Projects
  - Table mats
  - Wall hangings
  - Samplers
  - Applique
  - Rug making

## PUPPETS AND MARIONETTES

- Objectives
  - To gain knowledge and appreciation of puppetry
  - To acquire a working knowledge of the skills and uses of a variety of media used in making puppets
  - To acquire the ability to correlate art with other subjects: Art, Drama, History and Music
- Possible Projects
  - Hand puppets
  - Marionettes
  - Stick puppets

## LEATHERCRAFT

- Objectives
  - To gain a working knowledge of leather and its uses
  - To recognize the part of texture in leathercraft
  - To learn more about planning and producing a functional design

- To develop an appreciation for the professional leathercraftsman
- Possible Projects
  - Billfolds
  - Coin purses
  - Purses
  - Sandals
  - Moccasins
  - Book covers
  - Mixed media

## ARTS AND CRAFTS III

### CERAMICS

- Objectives
  - To develop a more comprehensive understanding of the field of ceramics
  - To explore the possibilities of ceramics as a vocational aspect of human life
  - To develop a proficiency in throwing and handbuilding
  - To experience working conditions similar to those of the professional ceramist
- Possible Projects
  - Pottery
  - Sculpture
  - Jewelry
  - Plaques
  - Mural making
  - Mosaic

### WEAVING

- Objectives
  - To develop a more comprehensive understanding of weaving
  - To develop a proficiency at weaving
  - To explore the possibilities of weaving as a vocational aspect of human life
  - To experience working conditions similar to those of the professional weaver
- Possible Projects
  - Setting up a loom
  - Development of patterns on the loom
  - Building a hand loom
  - Weaving of dishtowels, coverlets, etc.
  - Rug making
  - Basketry

### TEXTILE DESIGN

- Objectives
  - To develop an appreciation and an understanding of textile processes and their use in everyday life
  - To learn and explore techniques used in textiles
  - To explore textile design as a vocational aspect of human life
  - To experience working conditions similar to those of the textile designer

- Possible Projects
  - Rug designing
  - Batik
  - Stenciling
  - Weaving
  - Dyeing processes
  - Tie-dyeing
  - Quilting
  - Stitchery
  - Fabric printing

## COMMERCIAL ART

- Objectives
  - To identify in some small way with a commercial artist
  - To intensify student's sense of design
  - To develop some discrimination in the selection of lettering for different purposes
  - To develop an understanding of function and design
- Possible Projects
  - Lettering
  - Posters
  - Labels
  - Layout design
  - Product design
  - Costume design

## BIBLIOGRAPHY

### Magazines

Craft Horizons. American Craftsmen's Council, 44 West 53rd Street, New York 19, New York.

School Arts. Printers Building, Worcester 8, Massachusetts.

### Books

Allbon, Leonard G., Basic Basketry. London: M. Parrish. 1961.

Binyon, Helen. Puppetry Today. New York: Watson Guptil Publishers. 1966.

Erickson, Janet. Printmaking Without A Press. New York: Reinhold. 1966.

Groneman, Chris H. Leathercraft. Peoria: Charles A. Bennett Company. 1963.

Keller, Ila. Batik: The Art and Craft. New York: Reinhold. 1966.

Krevitsky, Nik. Batik Art and Craft. New York: Reinhold. 1966.

Krevitsky, Nik. Stitchery: Art and Craft. New York: Reinhold. 1966.

Lord, Lois. Collage and Construction in Elementary and Junior High School. Worcester, Massachusetts: Davis Publishers. 1958.

Lovoss, Janice. Modern Mosaic Techniques. New York: Watson Guptil Publishers. 1967.

Lynch, John. How To Make Collages. New York: Viking Press. 1961.

Nicholas, Heyne, Lee, Trilling. Art For Young America. Peoria: Charles A. Bennett Company.

Pattemore, Arnel W. Printmaking Activities For The Classroom. Worcester, Massachusetts: Davis Publications. 1966.

Petersen, Grete. Creative Leathercraft. New York: Sterling Publishing Company. 1960.

Press, Fred. Sculpture At Your Fingertips. New York: Reinhold. 1962.

Roy, Vincent A. Ceramics. New York: McGraw Hill Book Company.  
1959.

Wachowaik, Frank and Ramsay, Theodore. Emphasis: Art. Scranton:  
International Textbook Company. 1965.

Wright, Dorothy. Baskets and Basketry. London: B. T. Batsford.  
1959.

Young, Lillian M. Pineneedle Crafts. New York: Vantage Press.

Zaidenberg, Arthur. Prints and How To Make Them. New York:  
Harper and Row. 1964.

Zechlin, Katharina. Creative Enameling and Jewelry Making. New  
York: Sterling Publishing Company. 1965.

## BINDING

### PURPOSE OF BINDING

The Binding course is designed to prepare students for a commercial job in bindery. At the same time it offers immediate application of the learned experiences in production work by supplying the school system with curriculum guides, work books, etc.

### STRUCTURE OF BINDING

It is a one-year course, and includes operations in cutting, padding, collating, punching for spiral bindings, operating a manual GBC binding machine, and operating a book stitcher. Other operations may be added as the need and materials arise. The course may be repeated, with credit, by those wishing more experience in Binding.

### OBJECTIVES AND COURSE CONTENT

#### CUTTING ON MANUAL CUTTER

- To learn basic parts
  - Bed
  - Tape
  - Back stop and lock
  - Clamp
  - Blade
- To prepare for cutting stock
  - Raise paper clamp.
  - Set back stop.
  - Jog paper to side and back stop.
  - Lower clamp to depress paper.
  - Release blade and cut paper.
- To increase safety defenses
  - Only one person works on the cutter at a time.
  - Always use safety latch.
- To maintain
  - Oil lever and arms.
  - Keep blade sharpened.
  - Keep work area clean.
  - Double check safety, manual or automatic.

## PADDING

- To jog and insert card board
  - Handle stock, large or small.
  - Place in padding press.
- To apply adhesive
  - Apply the right amount.
  - Clean brush.
- To take out of press and to cut apart
  - Loose lock screws.
  - Use large flat blade knife and cutting under cardboard backing.
  - Trim; if desired.

## COLLATING ON ELECTRIC OR MANUAL UNITS

- To load bins
  - Arrange pages in correct sequence.
  - Place all pages in the bins with heads up or down.
  - Load correct amount (do not over load).
- To check
  - Pages out of order
  - Double sheeting
  - Empty bin
  - Electric collator is turned off when loading.

## PUNCHING SLOTS FOR SPIRAL BINDINGS

- To set up and adjust margins
  - Align back stop
  - Align dies
  - Switch to foot or table switch
- To handle stock to be punched
  - Jog papers
  - Place in punch
  - Check to see that pages are in correct order.
- To maintain machine
  - Monthly lubrication
  - Daily cleaning of dies and slots
  - Daily cleaning of pan trap
- To insure safety
  - Let machine warm up before use.
  - Do not over load machine.
  - Never place hands in between dies and base.

## OPERATING A MANUAL G. B. C. BINDING MACHINE

- To operate machine
  - Place spiral binding over post.
  - Open rings with handle.
  - Adjust length to be opened.
  - Place pages on open spiral.
  - Close and pull off.
- To maintain machine
  - Lubricate monthly.
  - Dust trash and paper from slots.

## INSTALLING AND OPERATING A BOOK STITCHER

- To thread the wire into your stitcher
  - Cut all binding ties that hold the wire on the coil EXCEPT the tie that holds the starting end.
  - While holding the starting end, cut the last binding tie. Remove all ties.
  - Turn the feed control lever COUNTERCLOCKWISE and up, to open the wire feed gears.
  - Straighten a section of wire 6" to 8" long. Cut off any bent portion at the starting end of wire.
  - Thread the wire through the loop on the tension spring.
  - Thread the wire down into the wire guide and through the wire feed gears and down until the wire is seen at the tube exit.
  - Guide the wire through the wire straightener and into the cutter block until it passes through the cut-off die.
  - Turn wire feed control lever CLOCKWISE to close the wire feed gears.
  - Insufficient pressure on the wire feed roll will give a short or uneven draw. Excessive pressure will flatten the wire. The pressure should be such that a uniform draw is attained for each stitch. To increase the pressure, turn the wire pressure screw at the top of the face plate to the right; to decrease, in the opposite direction. This adjustment should be checked whenever the size of wire is changed.
- To set your stitcher properly
  - Lower the clincher as far as possible.
  - Open the wire feed gears. Depress the foot treadle and turn the flywheel by hand until the formers are at the lowest part of their stroke.
  - Place the material to be stitched over the clincher. Adjust the clincher upward until formers and clincher make a slight depression in the work material.

- Turn flywheel by hand to complete the cycle and return the formers to the highest point of their stroke.
- Close wire feed gears. Operate the stitcher under motor power, driving several stitches into material of the same thickness as the work to be stitched. Examine resulting stitches to determine if the correct amount of wire is being used.
- To increase or decrease the leg length of the stitches, loosen the screw of the cutter block. Move the wire feed index lever to the right for more leg length to the left for less leg length. Tighten screws of index lever and cutter block.
- If one stitch leg is longer than the other, adjust to equalize the legs.
- To insure correct use
  - Turn the motor off when the stitcher is not in use.
  - Do not put your hands near area to be stitched when machine is operating.
  - Have material over the clincher when you drive a stitch.
- To maintain
  - See manual that comes with machine.

## BUSINESS PRACTICE

### PURPOSE OF BUSINESS PRACTICE

The purpose of teaching Business Practice is to develop and maintain certain office skills, and help build knowledge and confidence in students to prepare them for job placement in selected areas of office work or business.

### STRUCTURE OF BUSINESS PRACTICE

Business Practice is a three-year course. In Business Practice I, students are introduced to the use of the cash register, adding machine, telephone unit, and elementary filing. Vocabulary building and skill in making change are also stressed.

Business Practice II continues training and practice in the use of the adding machine. Stock control and fundamentals of grammar (word usage and correct spelling) are also taught.

In Business Practice III, students review the use of the machines introduced during the first two years. The operation of duplicating machines is taught along with techniques of applying for a job, job interviews, and grooming for the job. A business math textbook is used to introduce money and banking, and credit and insurance. This latter reinforces what is done in the mathematics course of study.

As skills are not the only requirement in keeping a job, each student receives help in developing his personality and his attitude toward his work.

## BUSINESS PRACTICE I

### CASH REGISTER

- Objectives
  - To teach students to operate the cash register
  - To teach students to make change correctly
- Suggested Activities
  - Plan check-out counter situation with packaged artificial fruits, vegetables, meats and empty staple boxes
  - Use of play money

### ADDING MACHINE

- Objectives
  - To teach students the touch method of the ten-key adding machine to add, subtract, and multiply
- Suggested Activities
  - Introduce parts of the machine and their function
  - Call out each step to be taken in problem drills
  - Give students simple worksheets
  - Call out finger movements

### TELEPHONE

- Objectives
  - To acquaint students with telephone service and good telephone procedures
- Suggested Activities
  - Learn telephone techniques and manners
  - Use teletrainer for practice situations
  - Increase knowledge of use of yellow pages (This also increases vocabulary. Example: Veterinarian is an animal doctor.)

### ELEMENTARY FILING

- Objectives
  - To introduce students to general rules of filing which will help them in their everyday affairs
- Suggested Activities
  - Use simple worksheets emphasizing alphabetizing of individual and firm names
  - Use the telephone book to show the alphabetizing of individuals and firms

## BUSINESS PRACTICE II

### ADDING MACHINE

- Objectives
  - To maintain skill of using adding machine
  - To develop speed and proficiency through basic skill review and practice
- Suggested Activities
  - Continue timed drills and worksheets
  - Call out finger placement (In order to observe students' finger placement a tape recorder may be used to allow teacher to help individuals.)

### STOCK CONTROL

- Objectives
  - To teach the importance of keeping a stock inventory
- Suggested Activities
  - Teach students the math that will be involved before giving an actual problem. Example: If the quantity is 4 and the unit price is 2 for 5¢, the actual cost is 10¢.

### FUNDAMENTALS OF GRAMMAR

- Objectives
  - To review correct usage as it relates to business
  - To emphasize correct spelling
- Suggested Activities
  - Use dictionary skills
  - Use General Business textbook
  - Use the daily newspaper to increase vocabulary by reading

## BUSINESS PRACTICE III

### ADDING MACHINE

- Objectives
  - To maintain skills learned
  - To stress the importance of speed and accuracy
- Suggested Activities
  - Worksheets
  - Drills

### CASH REGISTER

- Objectives
  - To review use of cash register
  - To stress speed and accuracy
  - To emphasize making change correctly
- Suggested Activities
  - Develop check-out problems with play money

### FILING

- Objectives
  - To teach the rules of alphabetical, subject, chronological, numerical, and geographical filing
- Suggested Activities
  - Use filmstrips (see bibliography)
  - Show films (see bibliography)
  - Give students work which will demonstrate and explain each rule as it is discussed
  - Use Gregg Quick Filing Practice Set

### STOCK CONTROL

- Objectives
  - To review keeping a stock inventory
- Suggested Activities
  - Have items to be purchased
  - Have purchase orders and worksheets for the students to fill in
  - Have paper bags in which to put the order when it is filled

## DUPLICATING MACHINES

- Objectives
  - To teach preparation of master copies (see Typewriting II)
  - To teach the students to operate the Mimeograph, Spirit Duplicator, and Thermofax
- Suggested Activities
  - Have students draw or type on mimeograph and fluid duplicating stencils and run material off on the machines
  - Have advanced students run work on the machines for teachers who have prepared the stencils

## APPLICATIONS

- Objectives
  - To teach the students the fundamentals of writing a letter of application and filling out an application blank
- Suggested Activities
  - Make transparencies for the overhead projector of an application to use with students
  - Read the application with the students and explain why each question is asked
  - Fill out the transparency as the students fill out individual copies of the application

## INTERVIEWS

- Objectives
  - To give the students confidence in applying for personal interviews
- Suggested Activities
  - Have students speak into a tape recorder to improve enunciation
  - Help each student to practice an acceptable conduct that will encourage the development of desirable traits and a pleasing personality

## BUSINESS MATHEMATICS TEXTBOOK

- Objectives
  - To emphasize those topics that prepare students for effective office performance

- **Suggested Activities**

- Have a variety of problems with clear and complete explanation
- Have continuous review of skills
- Use Civil Service and employment problems
- Practice the arithmetic of insurance and taxes
- Plan installment buying problems and procedures, and selling studies

## PUPILS' BIBLIOGRAPHY

### BOOKS:

Crabbe, Enterline, DeBrum. General Business. (Ninth Edition); South-Western Publishing Company, Chicago, Illinois, 1961.

Rosenberg and Lewis. Business Mathematics. McGraw-Hill Book Company, Chicago, Illinois, 1963.

American Telephone and Telegraph Company. Teletraining for Business Studies, 1965.

### WORKBOOKS:

Agnew and Cornelia. Office Machines Course. (Third Edition); South-Western Publishing Company, Chicago, Illinois, 1963.

Fasnacht and Bauernfeind. How To Use Business Machines. (Second Edition); McGraw-Hill Book Company, Chicago, Illinois. 1962.

### FILMSTRIPS:

Managing Your Money Series. Stanley Bowmar Company Incorporation, Valhalla, New York.

General Business Series. Stanley Bowmar Company Incorporation, Valhalla, New York.

### FILMS:

Progressive Filing Series. Stanley Bowmar Company Incorporation, Valhalla, New York.

A Manner of Speaking and If An Elephant Answers. Southern Bell Telephone and Telegraph Services.

## DRIVER EDUCATION

### PURPOSE OF TEACHING DRIVER EDUCATION

The purpose of teaching driver education to any student is to teach him attitudes, knowledge and skills which will serve him in the mechanical situation of today, and qualify him for a driver's license. Each student of driver education is taught the academic part of the course. As he enters into the program, he knows a standard has to be met to succeed in the course. Teacher-made material is used to supplement the State requirements. This teacher-made material is developed to help meet the needs of this special student. This material has been a satisfactory reinforcement for these special students.

Vocabulary lists have been made to give the same meaning as in the Driver's Handbook, but on a level this special student can understand. Materials for the Scroll Master, slides, filmstrips and Over-Head Projector have been developed to further reinforce instruction in this unit.

### STRUCTURE OF DRIVER EDUCATION PROGRAM

The Driver Education program has been established on an 18 week academic basis. This is about 60 hours in the classroom. In addition there is an in-car instruction of 20 hours of observing and listening, 10 hours are used for actual driving. This makes a total of 30 hours.

Driver Education begins with chapter twelve, "Your Driver's License" from Traffic Law and Highway Education published by the Department of Motor Vehicles Driver Education Division, Raleigh, North Carolina because the student is highly motivated and in need of having his many questions answered on how to obtain a driver's license. In this chapter the student finds out that certain things are illegal until he has either a learner's permit or an operator's license. Just because he is in the course does not give him the right to drive.

Chapter five "The Language of Safety" is taught next. This chapter is about signs and signals that will be needed throughout the in-class part of the course and the in-car part.

Chapter one "Basic Maneuvers" is then introduced, followed by the rest of the book in order.

This course for Special Education students is divided into two parts. The academic part or in-class instruction consists of 60 hours. The type of teaching varies from lecture, discussion, films, filmstrips, slides, charts, (commercial and teacher-made) diagrams.

During the first week or two the teacher must get information from the students to prepare forms DL243 and 450, furnished by the state. Form DL243 is a special permit that allows the student driver to drive with the teacher. Form 450 is a record to be finished and placed in the student's school folder. A state representative will come on call to examine students' eyes and sign form DL243.

The second part of the course is known as in-car instruction. This is for 30 hours. Ten hours of the 30 hours are for actual driving. Twenty hours are for observing and listening to the instructor as he points out some of the fine points of driving.

When the student has completed sixty hours in the classroom, he is taken to a large parking area. There the student is given ample time to get control of the car and himself, before he is allowed to go on the road. When the instructor is satisfied that the student is not nervous, he is taken for actual driving. This phase of the training lasts for thirty hours. Ten of these hours are in actual driving conditions.

During the driving, the student is taught and observed in many aspects of handling the automobile. These include:

- Attitude toward safety
- Personality
- Reaction in tight spots and maturity in losing right of way
- Approaches to intersections, stop signs, and traffic lights
- Quick stops--stopping as quickly and safely as possible when instructed to do so
- Backing
- Two types of road turns--turning around within the width of a street
- Stopping, starting, and parking on an upgrade
- Hand signals--good signals (precise)
- Use of the horn
- Right and left turns correctly made
- Staying in proper lane and correct lane changes
- Following cars at proper distance
- Passing cars and being passed by cars
- Yielding right of way to pedestrians
- Yielding right of way to other motor vehicles
- Driving posture
- Signs of confidence of his driving skills
- Nervousness or disquieting in the students resolving

## DRIVER EDUCATION OBJECTIVES

Each person has the right to drive a motor vehicle so long as he does not have any mental or physical disability that will prevent him from driving safely. Each person has the right to the convenience and enjoyment of leisure time which an automobile can contribute to his social and economic life.

The following objectives have been established for the students:

- To help the student realize that good driving is mainly a matter of attitude
- To help the student know that even after instruction, few of us are really good drivers; we all continue to learn
- To help the student understand that safe driving requires more than ability. It requires determination to be a good driver.
- To help the student understand many responsibilities go along with the holder and user of a diver's license
- To help the student understand that driving is a privilege and not a right
- To help the student understand his duty as a driver of a motor vehicle
- To help the student understand that owning a driver's license opens up a whole new world of economic opportunities and a wider way of enjoying his leisure time

## REQUIREMENTS FOR DRIVER EDUCATION

- 60 hours of classroom instruction
- 30 hours of in-car training (10 of these hours must be actual driving)

## MATERIALS FOR TEACHING DRIVER EDUCATION

Driver Education and Traffic Safety. The Center for Safety Education, New York University. Englewood Cliffs New York. Prentice Hall, Incorporated, 1967.

Halsey Kaywood. Let's Drive Right. Atlanta, Scott Foresman Company, 1964.

Lauer, A. R. and Joseph G. Pawlowski. Tomorrow's Drivers. Chicago: Lyons and Carnahan, Incorporated, 1967.

McInroy, Edward A. The Collier Quick and Easy Guide to Driving. New York: Collier Books, 1963.

Man and the Motor Car. Englewood Cliffs, New York. Prentice Hall, Incorporated.

Manual on Uniform Traffic Control Devices for Streets and Highways. Washington, D. C. United States Department of Commerce Bureau of Public Roads, 1961.

Practice Driving Guides. American Automobile Association.

Sportsmanship Driving. McGraw Hill.

Stone, Alfred R. Auto Dynamics and What They Mean to You. Austin, Texas: Steck-Vaughn Company, 1965.

Traffic Law and Highway Safety. North Carolina Department of Motor Vehicles.

#### AUDIO-VISUAL MATERIALS

ABC of Internal Combustion. Detroit, Michigan; Film Library, General Motors Building, General Motors Corporation.

Anatomy of an Accident. Winston-Salem, North Carolina, Western Electric.

Before It's Too Late. Winston-Salem, North Carolina, Western Electric.

Day in Court. Charlotte, North Carolina, Modern Talking Pictures Service.

Driving Under Hazardous Conditions. Winston-Salem, North Carolina, Western Electric.

Jet Age Driving and Behind the Scenes. Charlotte, North Carolina, Modern Talking Pictures Service.

Safeguarding Our Highways. Charlotte, North Carolina, Modern Talking Pictures Service.

Safety Belt for Susie. Winston-Salem, North Carolina, Western Electric.

## FILMSTRIPS

### You and Your Driving

- a. Driver Fitness
- b. Walk Left-Bike Left
- c. Rules of the Road
- d. Signs
- e. Your Responsibility
- f. What Would You Do?

Valhalla, New York, 12 Cleveland Street, Stanley Bowmar.

### Driver Education Series--Set 1

- a. Showdown with a Show-Off Driver
- b. Eyes of the Driver
- c. Drinking, Drugs, and Driving
- d. Nature's Driving Laws
- e. Traffic Clues and Cues
- f. Pedestrian and the Drivers

### Driver Education Series--Set 2

- a. How the Automobile Runs
- b. Stopping Distances and the Driver
- c. Traffic Laws made by Man
- d. Driving in Cities and Towns
- e. Driving under Adverse Conditions
- f. Driving on Freeways

Valhalla, New York, 10595, 12 Cleveland Street, Stanley Bowmar.

## MAGAZINES AND PAMPHLETS FOR TEACHERS AND STUDENTS

Car and Driver. 307 N. Michigan Avenue. Chicago, Illinois, 60601  
Ziff-Davis Publishing Company.

Mechanix Illustrated. Greenwich, Connecticut, 06630, Fawcett  
Publishers.

Popular Mechanics. 57th Street 8th Avenue, New York, New York.  
The Hearst Corporation.

Motor Trend. 5959 Hollywood Boulevard, Los Angeles, California  
90028. Peterson Publishing Company.

## VOCABULARY LIST

### CHAPTER 12

- barbiturates
- dangerous
- financial responsibility
- expire
- incompetent
- illegal
- habitual drunkard
- habitual user of narcotics
- prior
- prompt and courteous
- reinstated
- restricted to glasses
- road turn
- quick turn
- yielding right of way

### CHAPTER 5

- alerting
- attention
- circular
- crossbuck
- diamond-shaped sign
- eight-sided
- inattentive
- intention
- intersection
- misleading
- mileage and direction sign
- obstruction
- octagonal
- primary roads
- rectangular

### CHAPTER 1

- acceleration
- accelerator
- curb
- double parking
- economical
- edge
- emergencies
- forty-five degree angle
- ignition switch
- partially obstructed
- shoulder
- sideswipe

### CHAPTER 2

- alternately
- approximately
- business district
- collision
- crest of a hill
- economical
- endangering
- existing conditions
- horse power
- hovering
- impact
- increase
- irritating
- maximum
- open road
- reaction time
- reasonable and prudent
- residential district
- special speed limits
- secondary

### CHAPTER 3

- barbiturates
- careens
- continuous
- danger signals
- druggist
- embankment
- exhaust fumes
- frequently
- grip of friction
- ignoring
- impaired
- natural tendency
- narcotics
- pumping
- scanning
- smashing
- stare
- unfamiliar

## CHAPTER 4

- additional
- apparatus
- caution
- courteous
- decision
- drift
- estimate
- maintain
- one-way streets
- permit
- rear-end collisions
- solid yellow line
- three-lane highways
- unlawful
- victims

## CHAPTER 6

- intersections
- approaching
- assuming
- clover leaf
- common sense
- conflict
- consideration
- due card
- endanger
- erected
- hairsbreadth
- intends
- approximately
- opposite
- preference
- right-turn lane
- simplify
- swerve
- through street
- traffic circle
- under-inflated

## CHAPTER 7

- accelerator
- bicyclists
- minimizing
- pedestrians
- portion of the highway
- special consideration
- vehicles
- violate
- yield right of way

## CHAPTER 8

- basis
- decks of bridges
- depress his beams
- drizzle
- drowsy haze
- fatigue
- flicking
- illuminating
- low beams
- multiplies the effect  
    of glare
- negotiated
- obstructions
- restricted
- traction
- twilight hazard
- visibility
- seasonal hazards

## CHAPTER 9

- acceleration lane
- characterized
- controlled access
- deceleration lane
- expressway
- exit
- fluctuation
- highway hypnosis
- inflated
- median strip
- merge
- shoulder

## CHAPTER 8 - Part II

- antenna
- applies the brakes
- attitude
- avoid greater danger
- consequences
- deliberation
- emergency vehicles
- hazardous
- maximum
- primary roads
- secondary roads
- securely
- statue

## CHAPTER 10

- audible
- carbon monoxide gas
- effective
- electrical turn signals
- high-beam indicator
- hydraulic fluid
- lenses
- non-transparent stickers
- reflectors
- responsible
- tire pressure
- under-inflated
- ventilation

## CHAPTER 11

- argue
- arrest
- citation
- fault
- financial responsibilities
- identify
- insurance collision
- insurance liabilities
- intoxicating liquor
- law
- legally
- misdemeanors
- motioning
- narcotics
- point system
- pre-arranged racing
- provisional licensees
- rating plan
- render
- revocation
- safe driver
- security deposit
- suspensions
- violates
- warrant

## FOODS AND RELATED SERVICES

### INTRODUCTION

Homemaking education is an integral part of the total school program with goals and experiences built upon the needs, values and interests of the pupils and their families.

In the instructional program, experiences are provided which offer opportunity for participation in solving personal and family problems in relationship, housing, child care, food, clothing construction, maintenance and laundering.

Emphasis is given to creating and appreciating beauty to working together democratically, to establishing values, to making intelligent choices, to managing time and energy and to developing housekeeping skills.

To make the most effective use of teacher talent and physical facilities, students enrolled in the home economics areas are taught by two teachers. Classes are scheduled on a daily basis. The courses of study in each area are so written that teachers may teach independently, but at the same time reinforce the basic philosophy of home economics.

### STRUCTURE OF FOODS AND RELATED SERVICES

Units and approximate time limits at each level are:

First year: GENERAL FOODS 28 weeks  
CHILD CARE 4-6 weeks

Second year: HOME FOODS 22 weeks  
YOU, DATING AND MARRIAGE 8 weeks

Third year: INSTITUTIONAL AND COMMERCIAL FOOD SERVICE

### GENERAL OBJECTIVES

- To learn to adjust in social situations
- To develop good nutrition for oneself and family
- To develop the desire to serve foods attractively
- To be able to work independently or in a group
- To understand the need for sanitary conditions in handling foods
- To become wiser in ways of managing the money allotted in budget for food purchases

## COURSE CONTENT

### FIRST YEAR

#### GENERAL FOODS

- Objectives
  - To gain an understanding that the essentials of a good diet are important
  - To gain an understanding of the relationship of planning a grocery list and wise buying
  - To develop an understanding of food preparation terms
  - To develop an ability to use information given on labels, brands and prices as guides in buying
- Basic Learnings of General Foods
  - Each of the basic food groups makes a unique contribution to the nutrition of the body.
  - A grocery list can be easily compiled after meals have been planned ahead of time.
  - Using a planned grocery list will save time, money and energy.
  - Frozen foods, precooked, and packaged mixes are readily accessible and are time savers in the home.
  - Knowledge of abbreviations and equivalents used in recipes is necessary in understanding and following recipes.

#### CHILD CARE

- Objectives
  - To understand and appreciate each child as an individual worthy of respect
  - To appreciate the place of the child as a member of the family and society
  - To develop knowledge of behavior patterns of children as a basis for guiding them intelligently
  - To understand the needs of children at different stages of development
  - To understand the kinds and values of play
  - To acquire a sense of joy and responsibility in caring for children

- **Basic Learnings of Child Care**
  - Some things that happen to a child when he is young determines his concepts and attitudes in later life.
  - An understanding of the needs of the individual at various age levels helps one to understand his own needs.
  - Behavior problems need to be recognized and understood.
  - Books provide fun as well as learning.
  - Children's clothing should be simple, durable, easy to care for and easy to put on.
  - Love, security and a feeling of achievement are basic emotional needs of all individuals.
  - Curiosity should be encouraged not hampered.
  - The needs of a whole person are not met without spiritual development.

## SECOND YEAR

### HOME FOODS

- **Objectives**
  - To develop the ability to choose for one's self and the family meals which will be satisfactory from the stand point of cost and nutrition
  - To develop the ability to plan and evaluate well-balanced, attractive, economical meals at home and when eating out
  - To develop the ability to prepare foods well. To deepen the desire to use at home the knowledge about foods gained at school
  - To develop the ability to set the table attractively
  - To develop the desire to prevent food waste
- **Basic Learnings and Suggested Activities of Home Foods**
  - Food eaten will effect one's growth, disposition and stability.
  - Achieving satisfying and balanced family meals requires thoughtful planning.
  - Each person who sets the table expresses something of herself, a feeling for color, appreciation of design, a love of beauty, dignity and concern with details.
  - Make a check list of equipment an average home would need in order to be as efficient as possible.
  - Check on problem of food waste in pupils' homes. Discuss ways to prevent it.
  - Plan ways in which the responsibilities of family living can be shared by each member of the family.

## YOU, DATING, MARRIAGE

- Objectives
  - To understand one's self and one's position in the family and in society
  - To apply knowledge of problem solving in facing one's own problems
  - To understand, that dating establishes a new relationship with one's peers
  - To help pupil adjust to the pressures brought on by dating in relation to family and society
  - To develop high standards for dating and marriage
  - To understand that "in-laws" are important in marriage
- Suggested Activities
  - Make a list of hereditary traits, physical and habits of behavior.
  - Discuss "needs" felt by each individual person.
  - Make a list of steps in meeting problems constructively.
  - Make a list of traits desirable and undesirable in people.
  - Have a panel discuss dating problems in your community.
  - Debate - Who asks for the date?
  - How far should a boy or girl go on a date?
  - Discuss parental opposition to a marriage.
  - Discuss measures of maturity for marriage.
  - Discuss why a broken engagement instead of a broken marriage?
  - What is "puppy love"?
  - Discuss prerequisite tests for getting marriage license.
  - Analyze a case of in-law friction. Who was at fault?
  - Make a collection of pictures or cartoons depicting in-law relationships.
  - Act the part of parents and a newly married couple using students for the parts.

## THIRD YEAR

### FOOD SERVICES

- **Objectives**
  - To provide training in fundamental skills, knowledge, and attitudes in food preparation
  - To develop appreciation for good flavor, taste and value of foods
  - To help students gain some understanding of employment practices and requirements
  - To help the students understand why the standards of food service depend on cleanliness, attractiveness, order, safety and system
- **Suggested Activities**
  - Discuss personal qualifications of people working on a job.
  - Demonstrate good personal hygiene and personal safety.
  - Determine types of uniform to wear during work.
  - List qualities of food which appeal to eye as well as appetite.
  - Learn terms used on a menu.
  - Understand storing of different types of food.
  - Practice table setting and serving.
  - Practice cleaning equipment used in food preparation.

#### BIBLIOGRAPHY FOR FOODS UNITS

Better Homes and Gardens New Cook Book. Meridith Publishing Company, 1965.

Betty Crocker's Good and Easy Cook Book. Golden Press, 1962.

Betty Crocker's New Boys and Girls Cook Book. Golden Press, 1965.

Carson and Remee, How You Plan and Prepare Meats. McGraw-Hill Book Company, Inc. 1962.

Fleck, Fernadez and Munves. Exploring Home and Family Living. Prentice Hall, 1959.

Lewis, Peckham, Hoovey. Family Meals and Hospitality. Macmillan Company: Yew York, 1960.

#### BIBLIOGRAPHY FOR CHILD CARE UNITS

Brishave, Ricker. The Developing Child. Peoria, Illinois: Charles A. Bennett Company, 1965.

Shuey, Woods, Young. Learning About Children. Philadelphia: J. B. Lippincott Company, 1964.

Riebl, C. Luse, R. N. Family Nursing and Child Care. Peoria, Illinois, Charles A. Bennett Company, 1961.

#### BIBLIOGRAPHY FOR YOU, DATING, MARRIAGE UNIT

Landis, Landis, Personal Adjustment, Marriage and Family Living. Printice-Hall, Englewood Cliffs, New Jersey, 1966.

## GRAPHIC ARTS

### PURPOSE OF GRAPHIC ARTS

The purpose of the Graphic Arts course is to train the pupil in the use of the different machines which may be used on a job, beginning with the basic steps of printing and going to the more advanced techniques, from a model 80 to the more complex 1850 or Process Camera. The student will be introduced to the printing trade as a job for a craftsman, a person skilled to perform a job proficiently. The student will be taught those skills within his capacity to enable him to obtain a regular job.

The course is open to both boys and girls, but some mechanical knowledge is necessary to perform all the machine operations required in a printing plant. The class is conducted as an actual commercial plant, with the students being expected to perform as if they were on a job.

Promptness and courtesy, two main assets to every student's advantage, are stressed daily. Responsibility, self-discipline, and initiative are also emphasized. Students are trained to keep abreast of new and up-to-date equipment which may change frequently in this exciting and growing field.

## OBJECTIVE OF GRAPHIC ARTS

Graphic Arts is designed to train the student in a field in which he will be capable of gainful employment, supporting himself partially or fully.

## STRUCTURE OF GRAPHIC ARTS

Each section is taught as a single unit, but in relation to each other. For example, the student will learn where the plate will be used after it is processed as well as what is done to obtain the plate. The sections are organized as follows:

### Section I

- General graphic arts operations
- Principles of offset lithography
- Importance of Printing Today
- Cold type composition

### Section II

- Operation of Robertson Vertical Process Camera
- Operation of Robertson Temperature Controlled Sink
- Stripping negatives
- Use of plate making
- Filing plates and negatives
- Paper types and uses of each

### Section III

- Training for advanced offset lithography
- Printing technology
- Advanced process camera work
- Machine maintenance

## COURSE CONTENT

### Section I

#### GENERAL GRAPHIC ARTS OPERATIONS

- Objective
  - To train students in purpose and use of materials
- Materials used in each specific job
  - Process camera supplies
    - Film
    - Film developer
    - Fixer
  - Stripping material
    - Masking sheets
    - Stripping tape
    - Razor blade
    - Blackout solution
  - Plate making supplies
    - Presensitized plates
    - Developer
    - Lacquer
    - Preserver
    - Cleaner and conditioner
  - Press supplies
    - Repelex
    - Gum arabic

- **Platex**
- **Roller wash**
- **Deglazer**
- **Cylinder chrome cleaner**
- **Plate cleaner**
- **Blankets, impression**
- **Lubrication and Duro-Vis**
- **Ink**

## PRINCIPLES OF OFFSET LITHOGRAPHY

- Brief history of lithography
  - Credit given to Alois Senefelder
    - Background of inventor--biography
    - What lead to discovery
    - Effect on industry at that time
    - Materials first used
  - Changes in lithography
    - Comparison of machinery and equipment
      - Efficiency, speed
      - Construction, quality
      - Expectations for future
  - Main operating stations of basic offset printing
    - Feeder mechanism
    - Register board
    - Printing cylinders
    - Dampening unit
    - Ink system
    - Paper receiver
    - Power units
  - Preparation for operation of a machine
    - Operating assembly
      - Set paper side guides
      - Load paper to be run
      - Adjust pull in roller

- Set suction feet and vacuum
- Set blower tubes and pressure
- Adjust correct impression
- Materials necessary for operation
  - Fountain solution
  - Ink
  - Plate
- Proper adjustments necessary
  - Form rollers, ink
  - Dampening form roller
  - Correct blower and vacuum
  - Correct flow of ink from fountain
- Recognizing good copy or bad
  - Aspects of good reproduction
    - Sharp clear copy
    - Not tacky or smudged
    - No broken letters from plate
    - Washed out and light printing
- Operating the 1250 multilith
  - Power or motor switch
  - Contact dampening roller
  - Lower inking roller
  - Move impression level on
  - Move vacuum switch to on position for paper feed
  - Reverse procedure for stopping operation

## IMPORTANCE OF PRINTING TODAY

- Uses of printing
  - Industry
    - Inter-office communications
    - Working forms, vouchers
    - Packing containers
    - Advertisements
  - Social and civic organizations
    - Civic clubs, advertisements
    - Projects, programs
  - Society and community
    - Newspapers and periodicals
    - Books and instructional materials
    - Advertisements and circulars
  - Advances accelerated by printing
    - Education
      - Spread of the Bible
      - Spread of the English language
      - Reading materials available to more people
      - Advances in education
    - Research and science
      - Scientific research publications
      - Medical research publications
      - Textbooks
    - Public entertainment

- **Reading**
  - **Novels**
  - **Short stories, poetry**
  - **Paperback editions**
- **Specialties**
  - **Child games**
  - **Coloring books**
- **Economical and financial stability**
  - **Many jobs for craftsmen in printing**
  - **Jobs for thousands in related fields**
  - **Circulation of money on businesses in printing**

## COLD TYPE COMPOSITION

- Purpose of cold type
  - Uses of cold type composition from various machines
    - Vari typer and I.B.M. composing machines
      - Setting typed page for camera
      - Forms, business and office
      - Reproduction proofs for past-up changes
      - Lettering on sketches and blue prints
    - Headliner and photo-typepositters, etc.
      - Paper on film, photo prints of newspaper head
      - Office publication head
      - Transparancies from film for teaching aids
      - Year book sub-titles
      - Signs and information posters
    - Lino-film typepositer
      - Composing full newspaper pages
  - Operation of the 680 Headliner Composing Machine
    - Preparation for operation
      - Load tank with chemicals
        - Developer
        - Fixer
        - Water
      - Load paper or film into proper location
      - Select type master desired
      - Make adjustments according to the master chosen

- Lighthouse setting
- Letter space, point size
- Spacing between words
- Font setting, full, half
- Exposure setting
- Reproducing lines of copy
  - Turn to the letters of each word
  - Space between each word manually with spacing switch
  - Minimum and maximum length of line
  - Cutting the paper to start developing
- Maintenance of headliner
  - Cleaning of developing tank
    - Wash out every two days when not in use
    - Mix chemicals only as needed
    - Oil periodically when needed
    - Replace photographic paper when needed
    - Clean cutter blade to prevent jamming

## Section II

### OPERATION OF THE ROBERTSON VERTICAL PROCESS CAMERA

- Purpose of Process Negatives
  - Reproduce original proofs
  - Process lithographic plates
    - Line reproductions
    - Halftone reproductions
- Operating Controls
  - Manual controls
    - Power switch - on - off
    - Focus switch
    - Tape light switch
    - Enlargement and reduction controls (lens and copy)
    - Lens f-stop setting
    - Vacuum switch
    - Timer switch for exposure
  - Adjusting mechanisms to be set
    - Lens f-stop
      - Line work
      - Halftone work
    - Timer - exposure time
      - Line work
      - Halftone work
    - Vacuum size adjustment
      - Size of film
      - Size of magerta contact screen

- **Process of exposing film**
  - **Position of copy on copy board**
  - **Setting camera back for size of film**
  - **Set times for exposure**
  - **Position film on camera back**
  - **Turn vacuum on**
  - **Close camera back**
  - **Start timer for exposure**
  - **Open camera after timer resets itself**

## OPERATION OF ROBERTSON TEMPERATURE CONTROLLED SINK

- Purpose of Clad - Fex temperature controlled developing sink
  - To regulate water to 70°F for correct temperature for processing negatives.
  - To permit operator to watch development of negative and check after developing.
- Developing an exposed negative
  - Chemicals needed
    - Developer
      - Liquid concentrate
      - Powder concentrate
    - Fixer
      - Powder concentrate
      - Liquid stop bath
    - Wash bath or water
  - Mixing chemicals
    - Liquid concentrate to dilute work solution
    - Concentrate powder to solution or mix and dilute as needed
    - Fixer powder to liquid
    - Liquid stop bath to diluted form
  - Placing negative in developer
    - Submerge entire negative.
    - Remove negative when developed to maximum contrast desired.
    - Neutralize and place in fixer.
    - Wash negative and hang to dry.

- Care of Clad - Fex Sink
  - Give clean wash down after use to prevent stain.
  - Do not use anything abrasive on structure.
  - Car compound permissible to use.
- If fluorescent lights burn out replace them.
- When using control unit, be sure that it is plugged up.
- Wash out trays used with the sink.

## STRIPPING NEGATIVES

- Materials used in masking negatives for plate making
  - Negatives which have been developed
    - Line work
    - Halftone
  - Masking sheet or goldenrod flat
  - Tape and opaque solution
  - Light table
  - Razor blade
  - Ruler may be necessary for some type of work.
- Purpose of stripping or masking a negative
  - To make it permissible for light to pass through image area only.
  - To aid in registration in aligning to plate making and everyday printing.
- Procedure for masking a negative
  - Position of copy
    - Centering
    - Front or back
    - Work and turn
    - Work and tumble
  - Taping negative to flat
    - Holding negative straight
    - Taping corners
  - Cutting flat for light to pass through
    - Regular line work
    - Halftone or photograph
  - Opaquing negative pin holes
    - Cover all unnecessary flaws and pin holes.

## USE OF PLATE MAKING

- The purpose of plate making is to provide an offset lithographic plate for printing on the offset press
- Principle of Lithographic Plates
  - Light sensitive
  - Image will permit ink to adhere to it
  - Lithographic plates are faster and less expensive to produce
  - Wide range of products which can be reproduced using the off-set method
- Materials needed to produce a lithographic plate
  - Negative or positive product which has been produced from a process camera
  - Light source, arc light, photo lamp or mercury vapor lamp
  - Presensitive offset plate desirable size
  - Lacquer or developer, desensitive solution and developer, processing chemicals which are prescribed for the plate
  - Cloth used to apply chemicals, cotton pads, cheese cloth or any soft applicator
  - Water source to wash plate after processing
- Advantages of offset lithography compared to other processes for certain jobs
  - Speed of lithographic to conventional methods
  - Wide range of production
  - Less equipment and supplies required
  - Easier to train personnel

## FILING PLATES AND NEGATIVES

- Card number index file
  - Cards numbered with job title on them. Folders with plates and negatives numbered in relation to cards
  - Preparation of plates before being filed
    - Cleaning off excess ink
    - Proper preserving metal master
- Actual filing a job
  - New job, number on blank card depending on previous job number. Write job title on card. Replace in box (not card number).
  - Place plate and negative in folder with number matching card.
- At convenient time discard old and out dated plates.

## PAPER TYPES AND USES OF EACH

- Production and process for making paper
  - Types of papers produced
  - How paper is made
  - Source of materials and how used
  - What is being done to replenish supply of wood
- What papers are suited to what use
  - Book
  - Bond
  - Newsprint
  - Mimeograph
  - Duplicator
  - Onionskin
  - Ledger
  - Cover
  - Index, Bristol
  - Gum stock
  - Chipboard
- Qualities to look for when choosing a paper for a certain job
  - Strength
  - Stretch
  - Size
  - Suitability for job
  - Color

- Examination of the printed paper page
  - Ink adhering to paper
  - Bleeding
  - Ejector roller marks
  - Effect of moisture from press to paper
  - Gripper edge marks

### Section III

#### TRAINING FOR ADVANCED OFFSET - LITHOGRAPHY

- To familiarize trainees with the basic operation of offset printing
  - Discuss the principle of lithography in relation to the printing press.
    - Transfer of water and ink based upon theory of water and grease will not mix
    - Transfer of ink to image on plate
    - Transfer of water to non image area
    - Transfer of image to the blanket from plate
    - Transfer of image from blanket to paper
  - What is the result, if there are any alternations in basic steps?
    - Gray, washed out copy
    - Dirty background, scumming
    - Weak spots
    - No image at all
- To acquaint trainees with the nomenclature, location of controls and basic functioning of the offset press
  - Operating controls
    - Off-on controls
    - Ink and moisture controls
    - Paper controls, feeder mechanism and delivery
  - Dampening system
    - Fountain
  - Discuss particular system of fountain solution transfer.
    - Molletin covered rollers
    - Solution traveling on ink

- Inking System
  - Fountain
  - Rollers
- Cylinders
  - Plate cylinder
  - Blanket cylinder
  - Impression cylinder
- Paper Feeder
  - Feed table height adjustments
  - Vacuum feed mechanism and adjustments
- To demonstrate loading and positioning of the feeder and its parts and how to adjust the registration board and the delivery mechanism
  - Demonstrate the lowering and loading of paper table.
  - Discuss pre-operation paper table and insertion adjustments.
    - Height adjustment - automatic
    - Position and adjustments of
      - Vacuum controls
      - Blower controls
      - Pull-out rollers
      - Double sheet eliminator adjustments
      - Forwarding rollers and tapes
      - Registration components and adjustments
        - Paper stops
        - Side guides
        - Impression cylinder grippers

- Discuss travel of sheet over impression cylinder including contact with blanket cylinder.
- Demonstrate delivery operation including adjustment.
  - Ejector rollers
  - Delivery trays and guides
  - Static eliminator
- To demonstrate duplicator adjustments for different thicknesses and sizes of stock
  - Adjusting for paper thickness
    - Adjust sheet caliper and double sheet eliminator.
    - Adjust pile height control and pull-out rolls.
    - Adjust pressure between blanket and impression cylinder with stock to be run between those cylinders.
    - Determine amount, position and installation of plate packing (if used).
  - Adjusting for paper size changes
    - Adjust pile position.
    - Adjust sheet separation devices.
    - Adjust forwarding rollers and tapes.
    - Adjust side guides.
    - Adjust delivery.
- To identify the controls for starting and stopping the duplicator and to develop a familiarization with the process of feeding blank sheets
  - Visual inspection of duplicator
    - Feeder
    - Cylinders
    - Delivery

- Safety Precautions
  - Loose clothing or ties of operator
  - Moving parts
- Start Duplicator
  - Start Vacuum
  - Make necessary adjustments to feed sheets properly
  - Stop Vacuum
  - Stop Duplicator
- To demonstrate the proper preparation of the dampening unit for operation
  - Function of dampening unit to carry sufficient moisture to non-image plate areas
  - Types of dampening systems
    - Conventional-fountain solution carried from fountain to plate on molleton covered rollers
    - Combined-fountain solution carried to plate on the ink rollers
  - Function and names of rollers
  - Controls for adjusting amount of fountain solution carried to plate
  - Selection and preparation of fountain solution
  - Adding fountain solution to the duplicator
  - Initial dampening of rollers
  - Pressure between dampening (or inking) rollers
    - Discuss the importance of proper pressure and methods of checking and adjusting.

- To demonstrate the installation of new dampener covers on water rollers
  - Types of dampener covers
    - Tape backed molletin covers
    - Sleeve molletin covers
    - Parchment paper
  - Demonstrate removal of old and dirty dampener covers
  - Demonstrate installation of new covers
    - Run-in covers
    - Check pressure between covered rollers after run-in
- To demonstrate the proper preparation of the inking unit for duplicator operation
  - Function of the inking unit to carry sufficient amount of ink to image area on plate
  - Types of inking systems
    - Coventional
    - Combined (with fountain solution)
  - Name and function of each roller
  - Placing ink in the fountain
  - Controls
    - Adjusting the amount of ink to pass from fountain to rollers
    - Controls for bringing inking rollers into contact for ink transfer
  - Ink roller pressure
    - Discuss importance of proper pressure, and methods of checking and adjusting.

- To describe and demonstrate the preparation of the duplicator for operation (This unit presupposes mastery of all information in all preceding units.)
  - Review the preparation and operating procedures of
    - Feeding, register, and delivery systems
    - Dampening systems
    - Inking system
  - Review pressure checks and adjustments in inking and dampening systems.
  - Discuss and demonstrate methods of checking pressure (and adjusting) between blanket and impression cylinder.
  - Run test copies at varied blanket-to-impression cylinder pressures and show resultant printed image.
- To demonstrate the operation of the duplicator (This unit presupposes that the duplicator has been set-up for operation by the student, and that test copies have been approved.)
  - Counter setting
  - Operator checks during duplicator run
    - Ink and water balance
    - Ink coverage
    - Feeder and receiver operations
  - Maintain fountain solution
  - Maintain and agitate ink
  - Adjust duplicator speeds
  - Reloading feeder
  - Removing printed sheets
- To demonstrate proper methods for placing the image in the desired location on the sheet

- Adjust image up and/or down on the printed sheet.
  - Generally, margin at bottom of sheet should be slightly greater than at top.
- Adjust image from side to side on the printed sheet.
  - Make corresponding adjustments in feed and delivery tables.
- Adjust a tilted image.

Note: Actual adjustments for the above factors must be made according to the specific make of duplicator. Consult the manufacturer's instructions.

- To demonstrate proper procedures for printing on the back of previously printed sheet, or "backing up" those sheets
  - Check dryness of impression printed on first side of sheet before placing stock back in feeder.
  - Fan paper stock before placing on feeder table.
  - Check job specifications for head-to-head or head-to-toe back up positioning.
  - Discuss image positioning on sheet for margin show-through.
  - Run the job.
- To demonstrate the detection and correction of common troubles occurring during the duplicator run
  - Discuss and demonstrate (where possible) the following common problems and remedies.
    - Gray, washed out copy--possible causes
      - Too much fountain solution on image
      - Image breakdown
      - Poor ink distribution
    - Scumming--possible causes
      - Dirty or worn dampener covers
      - Ink too soft or greasy
      - Plate not properly desensitized
      - Other

- Excess of ink

Note: Amount of ink from side to side of sheet should be adjusted according to the amount of printed matter from side to side

- Uneven ink distribution--possible causes

- Too much ink distributed from certain portions off fountain

- Damaged or glazed ink roller

- Poor image development

- Weak spots--possible causes

- Low spots in plate or blanket

- Uneven inking or dampening

- Streaks--possible causes

- Improper packing of plate or blanket

- Malfunction of ink or dampening rollers

- Slipping blanket

- Image breaking down--possible causes

- Poor development

- Length of run (check manufacturer's specifications for estimated length of run)

- To demonstrate the installation and preparation of a new blanket for operation

- Remove old blanket.

- Install new blanket.

- Run-in the blanket on the duplicator.

- Check over-all impression by printing solid under too light a pressure.

- Correct low spots in blanket by patching with paper.

- To demonstrate the installation and removal of the offset plate on the duplicator
  - Show and discuss the various types of lithographic plates used locally.
    - Paper
    - Metal
    - Acetate
    - Other
  - Discuss methods of placing an image on each type of plate.
  - Discuss lengths of runs to be expected with each, handling procedures, limitations, etc.
  - Describe and show the plate clamps installed on duplicators in the shop.
  - Demonstrate and discuss possible adjustments of plates on plate cylinders.
- To illustrate and demonstrate the various types of offset masters and plates used and their characteristics
  - Show the various types of masters and discuss (if possible illustrate) how an image is placed on each.
    - Direct Image
      - Boxed
      - Bulk
      - Plain
      - Indicia
      - Preprinted reproducing
      - Preprinted non-reproducing
      - As part of unit set
      - Continuous
      - Roll
      - Metal
      - Master from master

- Transfer Image
  - Electrostatic-Burning-Xerox
  - Ektalith
  - Gevar
- Photo Image
  - Paper
  - Metal
  - Acetate
- Photo-Direct
- Discuss length of run, handling procedures, limitations, etc., of each type of master.
- Discuss problems that can and do develop with each type of master.
- Demonstrate how various types of masters are used to perform different jobs.
- Describe and show how different types of masters are attached to the duplicator.
- To demonstrate proper wash-up procedures for the duplicator
- To demonstrate duplicator preparations for next day's run

Note: This unit should be covered by the instructor at such time of the day that will allow sufficient time for proper completion

- Remove the printing plate.
- Apply preservative recommended by plate manufacturer.
- Remove fountain solution. Check condition of dampener rollers.
- Remove and wash the ink fountain.
- Use cleaner sheets to clean all ink rollers
- Remove (where possible) all ink rollers and brush off lint.

- Reassemble all parts removed in cleaning operations.
- Remove all dust, lint and ink stains from duplicator frame.
- Demonstrate night-latch function if it applies to shop duplicators.
- To demonstrate the proper lubrication of the duplicator
  - Discuss the use of lubrication chart and/or instructions.
  - Discuss the necessity of proper lubrication.
  - Avoid over-lubrication.
  - Show location of oil holes and other spots to be oiled as follows:
    - Cams
    - Gears, ratchets and pawls
    - Motors
    - Pumps
    - Sliding parts
- To discuss some of the fundamental characteristics of various paper stock
  - Discuss and show various types of commonly used paper.
  - Discuss following factors relating to paper.
    - Basic sizes
    - Weights
    - Finishes
    - Wire side
    - Felt side
    - Watermarks
  - Discuss grain direction, its significance in lithography, and common methods of determining it.

- To discuss various types of job specifications, their interpretations, and job record keeping
  - Discuss various job specifications and their interpretations as follows:
    - Length of run
    - Type of paper stock--weight-color-stock
    - Type and color of ink
    - Size of margins
    - Position of back-ups
    - Disposition of plates upon completion of job
    - Other
  - Discuss operator's job record as follows
    - Date of run
    - Total sheets printed
    - Time started, completed
    - Number of plates used
    - Other
- To describe and illustrate the use of various offset supplies and attachments
  - Discuss and illustrate the use of various offset supplies.
    - Blanket wash
    - Chrome degreaser
    - Metal plate preservative
    - Paper master preservative
    - Master etch
    - Fountain concentrates
    - Ink fountain liners
    - Blankets

- Masking sheets
  - Wicks (etch and blanket cleaner)
  - Padding cement
  - Hand cleaner
  - Pads-cotton
  - Ink-dryer, etc.
  - Imaging tools
    - Ribbons
    - Pens
    - Pencils
    - Stamp pads
  - Erasers
  - Miscellaneous
- Discuss and illustrate various attachments used on offset equipment.
- Automatic blanket cleaning attachment
  - Automatic etch attachment
  - Automatic sheet counter and feed shut-off
  - Auxiliary side blowers
  - Systems feed chute
  - Clutch
  - Ink agitator device
  - Master fluides
  - Work organizer
  - Etch tray
  - Chain delivery
  - Master cylinders
  - Automatic copy sorters
  - Ink roller cleaning device

## PRINTING TECHNOLOGY

- Relationship of the origin of printing to the vast industry of today
- Pick out individual machines of today and trace back, either by picture or specification report to notice advances made.
  - Help the pupil realize that the industry is constantly up dating machine.
- Note break throughs or conquest have been speeded up by printing industry.
- Classify printing equipment to job performed and study large variety
  - Composing
    - Hot type
    - Cold type
  - Printing Presses
    - Letter press
    - Offset - lithographic presses
  - Related equipment to letter press printing
    - Make-up table on stone
    - Strip material racks
  - Litho-Process Cameras
    - Vertical
    - Horizontal
  - Stripping materials
    - Light tables
    - Materials used
  - Plate making equipment
    - Letter press
    - Offset lithographic

- Bindery
  - Cutters
  - Stitches
  - Collators
- Various other supplies needed in the printing field
  - Compare all previous materials and equipment and study where and why they are used.
  - Compare quality, quantity and price, effects and any other aspect familiarize pupil with as much material he can handle.

## ADVANCED PROCESS CAMERA PRODUCTION

- Main purpose of a process camera
  - Reproduction of process negatives for use in exposing offset plates (Basic camera work taught in section two consisted mainly of line reproductions)
- Materials needed for halftone reproduction
  - Vacuum back process camera
  - Developing trays or sink
  - Film
  - Developer
  - Fixer or stop bath
  - Fixture for hanging negatives to dry
  - Magenta contact screen, (133 line)
  - Flash amber light
  - Magnifying glass
- Steps in developing halftone negatives
  - Position of copy on camera copy board
  - Determine the reproduction size.
  - Clean glass and lens.
  - Check to be sure that chemicals are mixed properly.
  - Position film on camera back with magenta contact screen overfilm.
  - Engage vacuum switch.
  - Close camera on expose film to light.
  - After exposure place film in developer and develop to desired step and contrast.
  - To stop development place in the fixer.
  - Wash negative and view dot pattern.

- A step which will vary depending on the negative, is flashing the negative with an amber light with the screen flush against the film, before it is developed; time of flash determined by a test exposure
- Dot structure objective which this process is trying to reach on negative
  - Solids will have a fine dot pattern
  - Middletones will have a 50% or less dot pattern
  - Highlights will have a very heavy dot pattern
- Dot pattern will be determined by length of flash and total exposure time

## MACHINE MAINTENANCE

- Purpose of maintenance to prevent excessive wear on parts and mechanical break downs
  - Up-keep daily and monthly and yearly
  - Simple lubrication to overhauls
  - Replacing worn and broken parts
  - Procedures for working on machinery
    - Always take precautions when removing parts.
    - Never use force unless it is necessary.
    - Remove parts and lay in order in which they will be replaced.
    - Check for excessive wear on shafts, bearings, bushings, and gears.
    - In case of wear, determine cause and try to correct it.
    - Clean and renovate, lubricate parts before replacing them.
    - On shafts, check for rough groves and burs.
    - Clean gears of all grit dried grease and replace lubrication.
    - Factory set adjustments should be made by a factory trained man.
  - Use instructional manual for given machine.
  - Use lubrication chart and schedule for lubrication.

## BIBLIOGRAPHY

### Books

Carlsen, Darvey E. Graphic Arts, Eight Printing. Charles A. Bennett Company, Incorporated, Peoria, Illinois 1965.

Cogoli, John E. Photo-Offset Fundamentals, Second Edition. McKnight and McKnight Publishing Company, Bloomington, Illinois 1967.

Cleeton, Glen U., Pitkin, Charles W., Cornwell, Raymond L. General Printing, Third Edition. McKnight and McKnight Publishing Company, Bloomington, Illinois 1963.

Delmar Publishers, Incorporated. Printing Layout and Design. Albany, New York, 1955.

Karch, R. Randolph. Graphic Arts Procedures, Third Edition. American Technical Society, Chicago: 1966.

Karch, R. Randolph, Buber, Edward J. Graphic Arts Procedures The Offset Process, First Edition. American Technical Society, Chicago: 1967.

Polk, Ralph W., Polk, Edwin W. The Practice of Printing, Revised Edition. Charles A. Bennett Company, Peoria, Illinois: 1964.

### Periodicals

Training Guide For Offset-Lithography, was developed under the direction of the Education Council of the Graphic Arts Industry, Incorporated and Division of Vocational and Technical Education, United States Office of Education. Printed by Addressograph Multigraph Corporation.

### Film

The Paper Forest, Modern Talking Picture Service, Incorporated Charlotte, North Carolina.

## LANGUAGE ARTS

### PURPOSE OF LANGUAGE ARTS

Language arts includes all those skills needed in oral and written communication: listening, speaking, writing, spelling and reading. However, reading is taught as a separate and individual course. Each of these areas will help the student to live as a more useful and contented member of a social group.

The language arts program is one that meets the individual needs of the student. The program is developed through everyday activities which have meaning and purpose for the individual.

### STRUCTURE OF LANGUAGE ARTS

The language arts program specializes in developing basic communication skills. These skills include listening, speaking, writing, spelling and reading.

The program is also focused on job related skills. Each facet in vocational vocabulary, applications and other forms and interviews will increase the skills pertinent to job placement.

### OBJECTIVES

The language arts curriculum includes these objectives:

- To understand the value of communication
- To encourage and develop good listening habits
- To help develop confidence of speaking in a group
- To foster respect for opinions of others
- To practice good manners in conversation
- To give practice in writing memos, paragraphs and simple letters of explanation

## COURSE CONTENT

### SPEAKING AND LISTENING

Through the development of speaking and listening skills, the student will secure information, maintain contact with his friends, and learn about the world in which he lives. These skills will make a valuable contribution to the student's feelings of poise, assurance, self-confidence, and his ability to relate to others.

Effective listening is so important it is an integral part of every classroom situation which calls for oral communication. It is important for the student to become a good listener because a great deal of his learning comes from what he hears. Experiences should be provided which will stimulate interpretation of what is heard as well as building attentive attitudes.

- Vocabulary
  - address
  - parent
  - birthday
  - signature
  - directions
  - courtesy
  - telephone
  - area code
  - operator
  - residence
  - directory
  - conversation
  - yellow pages
  - business
- Skills and Activities
  - Speaking
    - Supplying information
      - Mother's name
      - Father's name
      - Address
      - Birth date
      - Giving directions
    - Developing good speech habits
      - Hearing correctness
      - Speaking in an easy relaxed voice
      - Using good tone quality
      - Developing simple verbal messages
      - Encouraging self-expression
      - Making proper introductions

- Communicating through conversation
  - Displaying courtesy
  - Showing respect for individual opinions
  - Forming one's own opinion
- Telephoning
  - Making informal telephone calls
  - Making business telephone calls
  - Displaying telephone courtesy
    - Answering the telephone
      - State name when answering
      - At another person's residence, tell whose home it is
      - Answer the telephone as soon as possible when it begins ringing
    - Conversation
      - Caller's responsibility to begin and end the conversation
      - Limit calls to less than five minutes
    - Rules regarding use of telephone
      - No profanity
      - No practical jokes
    - Using the telephone directory
      - Finding personal names
      - Using the yellow pages
- Giving oral reports
  - Individual reports
  - Committee reports
- Listening and following directions
  - Using more complex directions
  - Remembering standard procedure
  - Remembering more than one idea at a time
  - Getting important facts from oral information
  - Arriving at generalizations
    - Taking into account number of factors
    - Applying them to new situations

## WRITING

Writing helps the student to communicate in an easy effective way to meet the demands of daily living. The student can learn to express his thoughts and ideas in a clear, concise, and logical manner. His writing skills should be of a functional nature and much time should be taken to help each individual overcome his writing difficulties.

- Vocabulary
  - application
  - name
  - age
  - sex
  - parent
  - address
  - reference
  - occupation
  - heading
  - greeting
  - body
  - complimentary closing
  - signature
  - sentence
  - paragraph
  - capitalization
  - punctuation
- Handwriting
  - Developing individual form
  - Comparing previous work to show improvement
  - Writing legibly and accurately
- Completing applications
  - Studying occupational words needed to fill out applications
  - Following instructions and completing information
  - Filling out application blanks
  - Finding jobs from the newspaper want ads
- Writing sentences
  - Structure
  - Paragraphs
  - Capitalization
  - Punctuation
- Writing letters
  - Different types of letters
    - Friendly
    - Letters seeking information
    - Letters giving information
    - Letters offering help
    - Letters making requests
  - Construction of letters
    - Friendly
    - Business
- Making reports
  - Oral
    - Individual
    - Committee
  - Written
    - From daily experiences
    - From reference books

## SPELLING

Learning to spell correctly is important for effective communication. The student will need to learn to spell those words which confront him most often in reading and writing. These skills should be of a functional nature and be an integral part of all learning activities.

- Spelling vocabulary
  - Basic vocabulary
  - Vocational vocabulary
  - Personal names and places
  - Days of the week
  - Months of the year
- Learning to use the dictionary
  - Alphabetical order
  - Divisions of the dictionary
  - Prefixes
  - Suffixes
  - Synonyms, homonyms, antonyms
  - Pronunciation
- Learning skills common to grammar
  - Capitalization
  - Punctuation
  - Abbreviations
  - Apostrophes
  - Contractions

## BIBLIOGRAPHY

Cage, Mabel Vinson. An Oral Language Practice Book. Harr Wagner Publishing Company, 1966. (Pupil use)

Eddy, Katherine Dawson, and Allen, Arline Booker. Special Education Reading and Language Arts. Hayes School Publishing Company, 1964.

Gastwirth, Paul, and Others. Building Language Power Series (grades 3-7). Charles E. Merrill Publishing Company, 1967.

Grizzard, Mabel Youree. Language Exercises (Four volumes). Steck-Vaughn Company, 1965.

McDonald, Annie Laurie. Language, Book Four, Rev. Steck-Vaughn Company, 1963.

Perkins, Phoebe M., and Taylor, Lloyd H. Language Book Five, Book Six and Book Seven. Steck-Vaughn Company, 1961.

Robertson, M. S. Learning and Writing English. The Steck Company, 1964.

Smith, Harley A., and Wilbert, Ida Lee King. I Want to Learn English. Steck-Vaughn Company, 1965.

Varnado, Jewel. English Essentials. The Steck Company, 1964.

## MATHEMATICS

### PURPOSE OF TEACHING MATHEMATICS

The purpose of teaching mathematics to any student is to equip him with tools which will serve him in living in today's society. Each student in mathematics is evaluated; his limitations and strengths are recognized. As he enters the mathematics program, he is taught at his own level the basic mathematical processes and instructional units. Concrete teacher-made materials suited to the individual needs of the students have proved to be a most satisfactory media for instruction.

Workbooks including activities in the fundamental operations, have been developed at the different levels of instruction and have proved to be of great benefit. Booklets based on life-like situations, including vocabulary lists and subject matter, have been constructed for particular units. Materials for the Scroll Master, an audio-visual aid, have been developed to further illustrate the instructional unit. In addition, the tape recorder is used frequently.

### STRUCTURE OF THE MATHEMATICS PROGRAM

The mathematical program has been established to meet the individual needs of the student. In addition to being taught the basic processes at his level, the student will study the following areas as he progresses through the Senior High

Measurement, Money, Banking, Income Tax, Budgeting

### OBJECTIVES

- To review and/or teach the basic processes of mathematics
- To give practical meaning to mathematics with concrete materials
- To apply understanding to real life situations

## FUNDAMENTAL OPERATIONS

### ADDING

- With no carrying
- With carrying in the ten's column
- With carrying in the hundred's column

### SUBTRACTING

- With no borrowing
- With borrowing in the ten's column
- With borrowing in the hundred's column
- With borrowing in the ten's and hundred's column

### MULTIPLYING

- Two numbers by a one-place multiplier with no carrying
- Two numbers by a one-place multiplier with carrying
- Three numbers by a one-place multiplier with carrying to the ten's column
- Three numbers with a one-place multiplier with carrying to the hundred's column
- Three numbers with a one-place multiplier with carrying to the ten's and hundred's column
- Three numbers with zeroes in the ten's column by one-place multiplier with and without carrying
- Two numbers by two-place multiplier with carrying
- Three numbers by a two-place multiplier with carrying

### DIVIDING

- One digit quotient, one digit divisor, with and without remainders
- Two digit quotient, divisor contained in the first digit of dividend, no remainder
- Three digit quotient with divisor contained in the first digit of dividend, no remainder
- Three digit quotient with divisor contained in the first two digits, no carrying, no remainder
- Two digit quotient with divisor not contained equally in first two digits of the dividend, with and without remainders
- Three digit quotient with carrying in the first step, no remainder; remainder in the second step only
- Three digit quotient with carrying in both steps with and without remainders
- Three digit quotient with carrying and remainder
- Two or three digit quotient ending in zero, with and without remainder

- Three digit quotient having zero in center, with and without remainder
- Two-place divisor

## FRACTIONS

- Adding
  - Like fractions with no reducing
  - Like fractions of less than one with reducing
  - Like fractions of more than one
  - Mixed numbers with no reducing
  - Mixed numbers with reducing
- Subtracting
  - Like fractions with no reducing
  - Like fractions with reducing
  - Mixed numbers with no reducing
  - Mixed numbers with reducing
  - Fractions from whole numbers with no reducing
  - Fractions from whole numbers with reducing
  - Mixed numbers with borrowing with no reducing
- Adding
  - Unlike denominators with and without reducing
  - Mixed numbers with unlike denominators with and without reducing
- Subtracting
  - Unlike denominators with and without reducing
  - Mixed numbers with unlike denominators, no borrowing, with and without reducing
  - Mixed numbers with unlike denominators with borrowing, with and without reducing
- Adding
  - Mixed numbers with unlike denominators, with and without reducing
- Subtracting
  - Unlike denominators, with and without reducing
  - Mixed numbers with unlike denominators, no borrowing with and without reducing
  - Mixed numbers with unlike denominators with borrowing, with and without reducing
- Multiplying
  - Whole numbers by fractions
  - Fractions by fractions
  - Fraction by fraction with cancellation
  - Mixed numbers by fraction using cancellation
  - Mixed numbers by mixed numbers using cancellation

- Dividing
  - Fractions by whole numbers with and without cancellation
  - Whole numbers by fractions with and without cancellation
  - Fractions by fraction with and without cancellations
  - Mixed numbers, with and without cancellation

## DECIMALS

- Adding
  - Tenths, with and without carrying
  - Hundredths, with and without carrying
  - Thousandths, with and without carrying
- Subtracting
  - Tenths, with and without borrowing
  - Hundredths, with and without borrowing
  - Thousandths, with and without borrowing
- Multiplying
  - A decimal by a whole number
  - By 10, 100, 1000
  - A decimal by a decimal
- Dividing
  - A decimal by a whole number
  - A whole number by tenths
  - A whole number by hundredths
  - A decimal by a decimal
  - A decimal with a zero as a place holder

## EQUATIONS

- Using the addition rule of equations
- Using the subtraction rule of equations
- Using the division rule of equations
- Using the multiplication rule of equations
- Using two rules to solve equations

## INSTRUCTIONAL UNITS

### MEASUREMENT

- Objectives
  - To teach the students the ability to read the ruler
  - To teach the students to use liquid measures
  - To teach the students to read a set of scales
  - To teach the students to tell time
- Content Outline
  - Using linear measures
    - Recognizing inch, half inch, quarter and three quarter's inch, eight's of inch, and sixteenth's of inch
    - Adding and subtracting measurements
    - Finding perimeters
    - Finding areas
  - Using liquid measures
    - Measuring using cup, pint, quart, gallon, teaspoon, and tablespoon
    - Adding and subtracting measurements
  - Using dry measures
    - Weighing items using ounces and pounds
    - Adding and subtracting weights
  - Telling time
    - Recognizing hour and half hour
    - Recognizing minutes and seconds
    - Adding time
- Suggested activities
  - Let students measure desk tops
  - Determine perimeters and areas by measuring dimensions of rooms

### USING MONEY

- Objectives
  - To teach students to recognize coins and bills of the United States monetary system
  - To help students learn the value of money
  - To teach students to count money and make change
  - To teach students to write monetary values
  - To use monetary values in every day living situations

- Content Outline
  - Recognizing the different amounts of money
  - Realizing the value of coins and bills
  - Counting money
    - Counting by pennies, nickles, dimes, quarters, dollars
    - Counting coins by switching from one coin to another
    - Making change by counting from cost of article purchased to amount of money given by customer
  - Writing the value of money
  - Adding prices of articles
  - Finding the amount saved on article
  - Finding the cost of several articles at the same price
  - Finding the price per pound
  - Working with per cent
    - Understanding the meaning and usage of per cent
    - Using discount
      - Discovering amount saved
      - Figuring sale price
    - Determining sales tax and total amount of sale
    - Finding amount of interest on loans
      - Finding interest for one year
      - Finding interest for less than a year
      - Finding interest for more than a year
      - Determining amount of interest compounded quarterly
- Suggested Activities
  - Use real money in teaching recognition and counting money
  - Make grocery list using food store advertisement to determine the cost of groceries
  - Use store advertisement of discounts to determine sale price, tax, and total amount of sale
- Suggested teaching materials
  - Per Cent (A teacher-prepared booklet)
  - "Per Cents" (Scroll for Scroll Master)

## BANKING

- Objectives
  - To teach the students the services available from the bank
  - To develop within the students the ability to use banking services

- Content Outline
  - Checking accounts
    - Opening a checking account
    - Making out a deposit slip
    - Writing checks
    - Filling out check stub and balancing check book
    - Endorsing checks
    - Understanding bank statements and cancelled checks
  - Saving accounts
    - Opening a savings account
    - Understanding interest gained on savings
    - Making a savings deposit, using the savings pass book
    - Filling out savings withdrawal slip
- Understanding Christmas Fund
- Borrowing from the bank
  - Using short-term loan
  - Using long-term loan
- Using a safety deposit box
- Suggested Activities
  - Take a field trip to the bank
  - Use checks, withdrawal slips, and deposit slips for the students to fill out
  - Encourage the students to open their own saving accounts
- Suggested Teaching Material
  - "Banking" (Scroll for Scrollmaster)
  - Banking (A teacher prepared booklet)

## INCOME TAX

- Objectives
  - To teach students the reasons for paying income tax
  - To instruct students how to fill out income tax returns
- Content Outline
  - Explaining why paying income tax is necessary
  - Understanding a federal return
    - Knowing who must file
    - Knowing where to file
    - Understanding a W-2 form
    - Understanding the difference between a joint return and separate return
  - Filling out a federal return
    - Filling out a short form 1040-A
    - Filling out a long form

- Determining exemptions
- Determining income from other sources
- Understanding adjustments
- Itemizing deductions
  - Medical and dental expenses
  - Contributions
  - Taxes
  - Interest expenses
- Filing a state return
  - Understanding who must file a return
  - Filling out a state return
    - Determining personal exemptions
    - Determining total income
    - Determining deductions
      - Contributions
      - Personal Interest
      - Medical Deductions
- Suggested Activities
  - Obtain W-2 forms, 1040-A and 1040 forms along with state forms from the Revenue Service for students to fill out

## BUDGETING

- Objectives
  - To get the students to understand approximately the amount of money they will be making
  - To help the students understand what will be deducted from their pay checks
  - To help the students realize for what they will have to spend the remainder of their checks
  - To develop within the students the ability to budget their money for their needs
- Content Outline
  - Understanding pay schedules
    - Receiving pay by the hour
    - Receiving pay by the week
    - Receiving pay every two weeks
    - Receiving pay by the month
  - Understanding the pay check
    - Recognizing deductions
      - Understanding Social Security
      - Understanding Withholding Tax
        - Paying on Federal income tax
        - Paying on State income tax

- Understanding other deductions
  - Paying on retirement
  - Paying on insurance (Life, Hospitalization, or Fire)
- Spending the pay check
  - Paying bills such as utilities, rent or house payment, doctor or dental bills
  - Buying items
    - Purchasing food (watching week-end ads for specials)
    - Buying clothes (saving on out-of-season sales)
      - Using advertisements
      - Being aware of high-pressure salesmen
      - Using installement buying or charge accounts
        - Using time payment
        - Paying carrying charges
        - Paying interest on purchases
        - Looking at advantages and disadvantages of charge accounts
      - Using thirty-day accounts
    - Borrowing to buy
      - Borrowing from the bank
      - Borrowing from the loan company
    - Purchasing a car
      - Financing a car
      - Buying car insurance
        - Obtaining liability insurance
        - Buying collision insurance
- Suggested Activities
  - Discuss
    - How Social Security is used
    - Why we pay state and federal income tax
    - Hospitalization and medical insurance
  - Use community professional resources
    - Invite person from Social Security office to speak to class on Social Security benefits
    - Have insurance man come to class to give the students an idea of the different kinds of insurance they will need and approximately how much they will be paying for the insurance
    - Take a field trip to a furniture store assigning a given amount of money to each student to buy three rooms of furniture
- Suggested Teaching Materials
  - Money Matters (a teacher prepared booklet)

TEACHER'S RESOURCE BIBLIOGRAPHY

Bernstein, Allen L. and Wells, Davie W. Trouble Shooting Mathematics Skills. Holt, Rinehart and Winston, Inc., New York, 1963.

Parsky, Larry. Mathematics for Family, Mathematics for Employment, Mathematics for Citizenship (Target Series). Mafex Associates Inc., Johnstown, Pennsylvania, 1966.

Turner, Richard H. The Money You Spend. Follett Publishing Company, New York, New York, 1962.

Weiland, Robert G. and Woytek, Steve J. Credit, Loans, and Taxes (Mathematics In Living Series). Pruett Press, Inc., Boulder, Colorado, 1967.

## MECHANICAL DRAWING

### PURPOSE OF MECHANICAL DRAWING

To offer the students general information and a guide for practice in some areas of drafting. To enable the students to be able to use techniques and skills that are currently needed but have not yet been acquired by the students.

### STRUCTURE OF MECHANICAL DRAWING

This three-year course progresses systematically through description of the basic tools used by the draftsman, through lettering, to an explanation of drawing orthographic and isometric projections. This course is planned in conjunction with the shop course.

### OBJECTIVES

- To give training in the use of working drawings
- To foster the habit of making sketches and drawings for conveying ideas to others
- To develop neatness and good work habits
- To develop an appreciation for the relationships made possible by drawings
- To instill in the student the importance of following a plan or pattern
- To acquaint students with drafting terms and symbols
- To develop within the student a feeling of self confidence
- To teach the student the importance of using and taking care of materials and instruments

## COURSE CONTENT

### FIRST YEAR

#### UNDERSTANDING TOOLS USED

- The drawing board
- Drafting table
- T Square
- Triangles
- Scales
- Pencils
- Erasers
- Paper

#### DRAWING LINES

- Use of T Square
- Placing the paper
- Alphabet of lines
- Symbols
- Drawing horizontal lines
- Drawing vertical lines
- Drawing diagonal lines

#### USING THE TOOLS

- Reading the scale (ruler)
- Laying out the sheet
- Erasing
- Keeping drawings clean

#### ADDING MEANING TO THE LINES

- Lettering
  - Gothic
  - Roman
  - Old English
- Lettering Strokes
  - Vertical
  - Horizontal
- Cases
  - Lower Case
  - Upper Case

#### DRAWING THE OBJECTS YOU SEE

- Perspective projection
- Isometric projection

- Orthographic projections
- Dimensions
- Steps in drawing an orthographic projection

MAKING THREE VIEWS FROM ONE

- Orthographic projection from isometric projection

MAKING ONE VIEW FROM THREE

- Isometric projections from orthographic projections

## SECOND YEAR

### GENERAL REVIEW TO INCLUDE ALL THINGS LEARNED THE FIRST YEAR

- Tools
- Lines
- Using the tools
- Lettering
- Drawing the different objects
- Making three views from one
- Making one view from three

### INKING

- How to use ink in drawing

### DRAWING

- Views of a drawing
- Auxiliary views
- Sectional views
- Conventional break
- Fillets and round
- Symbols
- Projection
- Intersections
- Revolutions
- Curves
- Geometrical constructions
- Development

### PICTORIAL DRAWING

- Isometric
- Oblique
- Perspective

## THIRD YEAR

### MULTIVIEW PROJECTION

- Need for multiview drawing
- Viewing an object
- Spacing of views
- General procedure for pencil drawing
- Inclined surfaces

### SHEET-METAL DEVELOPMENT AND LAYOUT

- Some facts about sheet metal
- Parallel-line development
- Radial-line development
- Triangulation

### GRAPH, DIAGRAMS, MAPS

- Practical uses
- Graph making

### ARCHITECTURAL DRAWING-HOME PLANNING

- Architectural drawing in relation to your home
- Prefabricated house
- Planning a home
- Putting your plans on paper

### DESIGNING AND BUILDING OF MODELS

- Learning to design
- Miscellaneous project designs

## BIBLIOGRAPHY

### Teacher's References:

Nelson, Howard C. A Handbook of Drafting Rules and Principles.  
McKnight and McKnight Publishing Company. Illinois, 1958.

### Pupils's Books:

Brown, Walter C. Drafting. Homewood, Illinois, The Goodheart -  
Wilcox Company, 1964.

Harman, Earl W. Introduction To Mechanical Drawing. Allyn and  
Bacon Inc. 1966.

### Materials:

Make believe ruler - by Nifty

## NURSE'S AIDE

### PURPOSE OF NURSE'S AIDE COURSE

- To train students to be nurse's aides in which capacity they can be employed after completion of the course
- To train students in nursing techniques both in skillful handling of patients and apparatus with minimum discomfort and elimination of unnecessary movements so as to insure maximum speed and highest efficiency
- To prepare students for meeting the problems of daily work that they will face in employment as nurse's aides

### STRUCTURE OF NURSE'S AIDE COURSE

The Nurse's Aide course is designed as a two year course. Prerequisite to entering the nurse's aide course, the student must have completed the introductory course in general health and basic first aide which is included here as a part of the total course.

Nurse's Aide I is concerned with:

- Classroom learning, with field trips
  - Patient care: bed baths, bed making, meals, wheel chairs, crutches, hospital beds
  - Hospital procedures, staff and functions, Nurse's Aide role
  - Technical terms needed
  - Skills: taking temperature, blood pressure, etc.

Nurse's Aide II gives a quick review of the first course and provides on-the-spot practical work at Medicenter for the year.

### OBJECTIVES

- To train the student in general health and basic first aid
- To provide knowledge in general patient care
- To develop skills for carrying out assignments with speed, accuracy and understanding
- To learn to work successfully with the following people: members of the profession, co-workers, superiors, patients, and visitors
- To develop a healthy attitude and personal interest in the profession

## COURSE CONTENT

### GENERAL HEALTH AND BASIC FIRST AID.

- **Health**
  - Body care-dressing for weather, food, hair, baths, nails, underclothes, clothes, etc.
  - Body systems and functions
    - Skeletal system
    - Muscular system
    - Circulatory system
    - Respiratory system
    - Digestive system
    - Urinary system
    - Nervous system
    - Endocrine
    - Reproductive system
    - The sense organs
  - Growing and its effects
  - Diseases
  - First Aid
    - Minor cuts
      - Washing, antiseptics
      - Bandaging
    - Sprains
      - Applying cold, heat
      - Bandaging
    - Broken bones
      - Care in moving patient
      - Splints
      - Slings
    - Artificial respiration
    - Medicines-use and care

## ORIENTATION TO NURSE'S AIDE

- Discussing the qualities necessary for a nurse's aide in personality, appearance and conduct on duty
- Understanding duties and responsibilities that will be expected of nurse's aides
- Understanding how the nursing care will be evaluated during the on-the-job training
- Understanding the nurse's aide's relationship to the other members of the profession
- Reference book: Abdallah, Mary C. Nurse's Aide Manual. Philadelphia, Penn., W. B. Saunders Company, 1965.
- Special activity: Tour a nursing home

## INTRODUCTION TO PATIENT CARE

- Understanding the geriatric patient
- Avoiding illness by practicing hand-washing technique
- Answering the patient's signal
- Arranging the patient's unit
- Caring for flowers
- Making an empty bed

## FOODS AND FLUIDS

- Passing fresh drinking water
- Serving and removing a food tray
- Feeding a patient
- Serving extra nourishment
- Special activities:
  - In classroom "nurse" helps "patient" eat in make-believe situations (i.e., blind patient, paralyzed patient, or patient with no appetite)
  - "Nurse" feeds "patient" in classroom with school lunches

## MOVING PATIENTS

- Helping a patient move in bed
- Supporting the body in various positions
- Helping a patient into a wheelchair
- Helping a patient walk

## MORNING, AFTERNOON AND EVENING CARE

- Giving and removing a bedpan or urinal
- Caring for mouth and teeth
- Giving a bed bath
- Giving a back rub
- Combing a patient's hair
- Changing the patient's hospital gown
- Making an occupied bed

- Helping with a tub bath or shower
- Caring for the hands and feet
- Weighing a patient
- Shaving a male patient
- Reference book: Reese, Dorothy E. How to be a Nurse's Aide. Washington, D. C. American Nursing Home Association, no date.
- Special activities:
  - Scales for weight and height can be enlarged on the board with students finding assigned weights or heights

#### ANATOMY AND SEX EDUCATION

- Learning the basic parts of the gastrointestinal tract
- Learning the basic parts of the genitourinary tract
- Understanding the reproductive systems and birth process
- Using words pertaining to nursing:
 

• Continent	• Vagina
• Incontinent	• Uterus
• Constipation	• Diabetes
• Diarrhea	• Abdomen
• Fecal impaction	• C-section
• Restraint	• Catheter
• Laxative	• N-B tube
• Buttocks	• Saliva
• Tailbone (coccyx)	• Edema
• Rectum	• Force fluids
• Colostomy	

#### ELIMINATION

- Collecting urine specimens
- Measuring diabetic urine for sugar and acetone
- Measuring intake and output
- Special activities:
  - Use yellow water with juice for urine sugar tests in classroom
  - Practice estimating intake in classroom using coffee cup, soup bowl, juice glass, etc.

#### VITAL SIGNS AND BLOOD PRESSURE

- Taking a temperature
- Taking a pulse
- Counting respirations
- Taking a blood pressure
- Special activities:
  - Students reproduce thermometer scale on paper and use this to find assigned temperatures

## ADMISSION AND DISCHARGE OF PATIENTS

- Admitting a patient
- Helping with a physical exam
- Helping with a vaginal or rectal exam
- Discharging a patient
- Giving post-mortem care

## SPECIAL PROBLEMS IN NURSING CARE

- Caring for the incontinent patient
- Preventing bedsores and protecting the patient
- Caring for a patient in a plaster cast or traction
- Caring for the critically ill
- Exercising a stroke patient with active or passive exercises
- Restraining a patient in bed or in a chair or with mitts

## TREATMENTS

- Giving a cleansing enema
- Giving a retention enema
- Applying heat or cold
- Applying solutions to unsterile wet dressings
- Irrigating a colostomy
- Feeding a patient through a nasogastric tube

## CHARTING

- Reporting BMs
- Reporting intake and output
- Charting a patient's daily report
- Using abbreviations in charting:

• SSE	• c
• BM	• s
• E	• q
• R	• CVA
• Lax	• BID
• Ca	• TID
• STAT	• QID
• Pt.	• ac
• P.T.	• pc
• Wt.	• ad lib
• Ht.	• BRP
• OOB	• H.S.
• PRN	• D.R.
• BP	• qo
• TPR	• noc
• I&O	• H.

## Textbook:

McGolrick, Betty and Sutherland, Dorothy. Handbook for Nursing Aides in Hospitals. Chicago, Ill.: American Hospital Association, no date.

## POWER MECHANICS

### PURPOSE OF POWER MECHANIC'S

To prepare students with learning problems to function as mechanic helpers, service station attendants and assembly line workers in the automotive and related fields.

### STRUCTURE OF POWER MECHANICS

#### First Year

Introduction to internal combustion engines, basic tools and names of auto parts.

#### Second Year

Learning to remove and replace various parts. Training as service station attendants.

#### Third Year

Repairing and rebuilding of automotive parts with emphasis on block and head rebuilding. Also lawn mower repair.

### OBJECTIVES

- To arouse interest in the automotive repair, auto servicing and automobile assembly lines.
- To develop aptitudes and skills towards the automotive field and related ones.
- To teach students how to use auto repair tools and equipment.
- To teach students how to service and repair automobiles and keep them in good running condition.

## COURSE CONTENT

### FIRST YEAR

#### VALUE OF LEARNING AUTO MECHANICS AND SERVICING, AND AUTOMOTIVE FACTORY ASSEMBLY WORK

- How one can save by doing own repairs and servicing
- Various openings and demands for automotive workers and related mechanical workers
  - Pay scales for automotive workers
  - Figures on shortages of workers in the automotive field
- Teaching Aids
  - Films: "How To Buy a Used Car" (General Motors and Ford Company)  
"Styling and The Experimental Car" (Ford Motor Company)
- Activities
  - Visit service stations and garages and let students ask questions on how much the workers are paid, working conditions, how they like the automotive field, etc.

#### LEARNING NAMES OF TOOLS AND EQUIPMENT AND OPERATION OF SUCH

- Hand tools
- Power tools
- Related equipment
- Teaching Aids
  - Book: General Motor's Corporation, "A B C's of Hand Tools"
  - Film: "A B C of Hand Tools I and II" (General Motors WSFC Film Library)
  - Tool Identification Kit (Interstate Printers and Publishers, Inc., 1927 Jackson Street, Danville, Illinois 61832)

#### CARE OF FACILITIES, EQUIPMENT AND SAFETY RULES

- Garage and service station cleanliness
  - Care of floors
  - Care of bathrooms
  - Care of windows, walls, lights

- Safety Rules
  - For hand tools
  - For power tools
  - For other equipment, welder, lifts, etc.
- Teacher Aids
  - Charts and cartoons on safety-National Safety Council
  - Film: "Safest Township Anywhere" (General Motors)

#### BASIC PRINCIPLES OF INTERNAL COMBUSTION ENGINES

- Defining of internal combustion
- The how and why of internal combustion
- Examples of internal combustion engines
  - Lawn mowers
  - Automobile
  - Aircraft (gasoline powered)
  - Diesel
  - Jets and turbines
- Teaching Aids
  - Films: "The A B C of Internal Combustion" (General Motors)
  - "The A B C of the Automobile Engine" (General Motors)
  - "The A B C of Diesel Engine" (General Motors)
  - "The A B C of Jet Propulsion" (General Motors)

#### INSPECTION AND LEARNING OF AUTO PARTS AND THEIR FUNCTION

- Head and block
- Cooling system
- Electric
- Brake system
- Accessories and equipment (Power and Hydraulic)
- Chassis and running gear
- Body parts
- Fuel system
- Teaching Aids
  - Films: "Where Mileage Begins" (General Motors)
  - "Firebird III" (General Motors)

## SECOND YEAR

### REVIEW OF MAIN POINTS OF FIRST YEAR COURSE

- Review of tools, names, uses and care of them
- Review of auto parts, their names and functions
- Review of safety rules
- Teaching Aids
  - Films: "Progress in Total Performance" (Ford Motors)  
"The Invisible Bridge" (Ford Motors)  
"The Rouge" (Ford Motors)  
"The Bridge To Safety" (General Motors)

### SERVICE STATION ATTENDANT TRAINING

- Proper dress and appearance
- Customer approach and courtesy
- Operation of gas pumps
- Under hood check points
- Outside check points
- Selling other products and services
- Activities
  - Trips to the filling station
  - Let students learn by observation and actual use of equipment

### HOW TO SERVICE COOLING SYSTEM

- Draining, flushing, and cleaning of radiator and water jacket
- Installing of antifreeze and thermostat
- Installing heater and radiator hose and clamps
- Checking, removing and installing freeze plugs
- Teaching Aid
  - Film: "Temperatures Made To Order" (General Motors Corps)

### LUBRICATION

- Oil change
  - How to check oil level
  - Draining of crank case
  - Proper weight and grades of oil to install
  - Removal and installation of filter

- Chassis lubrication
  - Locating and cleaning fittings
  - Use of grease guns, manual and power
  - Other points to be lubed or oiled
  - Checking and lubricating of transmissions
    - Automatic
    - Manual
    - Rear end
- Teaching Aid
  - Film: "The Why of Automobile Lubrication"  
(United States Bureau of Mines)

#### SERVICE OF VARIOUS PARTS

- Spark plugs
  - Parts and construction
  - Removal
  - Cleaning
  - Installation
- Battery
  - Parts and construction
  - Proper filling with water
  - Cleaning of parts and cables
- Headlights and other lights
  - Checking and replacing of fuses
  - Checking of wiring and sockets
  - Removing and replacing bulbs
  - Replacing directional signal flasher
  - Headlight aiming
  - Checking and replacing stoplight switch
- Teaching Aids
  - Film: "Story of A Modern Storage Battery"  
(United States Bureau of Mines)

#### CLEANING AND WAXING

- Interior cleaning
- Washing of body
- Washing of wheels and tires
- Caring for chrome
- Waxing
- Steam cleaning of motor and body (underneath)

## TIRE CHANGES

- Jacks and lifts
  - Hand jacks and bumper jacks
  - Heavy duty and service station jacks and lifts
- Removal of wheels and tires
  - Use of lug wrench
  - Removal of tires and tubes
- Patching
  - Tube type
  - Tubeless type

## THIRD YEAR

### EMPLOYMENT IN AUTO SERVICING FIELD

- How and where to look for a job
- Proper dress and approach
- Proper attitude toward job, employer, fellow employees and customer

### REBUILDING OF AUTO PARTS

- Generator and starter
- Fuel pumps and carburetor
- Brakes and springs
- Universal joints
- Teaching Aid
  - Films: "Where Mileage Begins" (General Motors)

### REBUILDING OF ENGINE

- Tear down
- Measuring the cylinders and piston assembly for wear
- Measuring crankshaft and connecting rod bearings
- Honing, reborning and refinishing of block
- Grinding valves and refinishing of head
- Reassembly of block and head. Emphasis on proper torqueing
- Testing and breaking
- Teaching Aids
  - Films and Filmstrips: "Servicing the Modern Engine" (Perfect Circle Company)  
"Engine Assembly" (Norwood Films)

## LAWN MOWER REPAIR

- Disassembly
  - Four cycle
  - Two cycle
- Replacing worn parts
- General servicing
  - Spark plugs
  - Magneto
  - Carburetor
  - Blade sharpening
  - Proper running and maintenance
- Teaching Aids
  - Charts from Briggs Stratton Corps

## REFERENCES FOR POWER MECHANICS

- Billiet, Walter E., Venk, Ernest. Automotive Engines: Maintenance and Repair, Third Edition. American Technical Society, Chicago, Illinois, 1965.
- Buicker, Frederick E. Automotive Guide, First Edition. Howard W. Sams and Company Incorporated, Indianapolis, Indiana, 1966.
- Crouse, William H. Automotive Mechanics, Fourth Edition. McGraw Hill Book Company, Incorporated, 330 West 42nd Street, New York 36, New York, 1960.
- Delmar Publishers, Incorporated. General Repair Tools for Automobile Mechanics. Albany, New York.
- Delmar Publishers Incorporated. Practical Problems in Mathematics, Automotive Trades, Second Edition, Albany, New York, 1954.
- General Motors Corporation. A B C's of Hand Tools. The Corporation, Detroit, Michigan, 1945. (Free)
- General Motors Corporation. A Power Primer. Detroit, Michigan: General Motors, 1955. (Free)
- Glenn, Harold T. Automobile Engine Rebuilding and Maintenance. Chilton Company, Philadelphia, Pennsylvania, 1958.
- Glenn, Harold T. Auto Mechanics. Charles A. Bennett Company, Incorporated, Peoria, Illinois, 1962.
- Institute for Research, The Automotive Mechanic and Repair Shop Owners-Careers. Institute for Research, 537 S. Dearborn Street, Chicago 5, Illinois, 1953.
- Kuns, Ray F. Automotive Essentials, Revised Edition. The Bruce Publishing Company, 400 N. Broadway, Milwaukee, Wisconsin, 1958.
- Spicer, Edward D., Venk, Ernest. Automotive Maintenance and Trouble Shooting, Third Edition. American Technical Society, Chicago, Illinois, 1963.
- Wetzel, Guy F. Automotive Diagnosis and Tune Up, Fourth Edition. McKnight and McKnight Publishing Company, Bloomington, Illinois, 1965.

## SOURCES OF FILM SUPPLY

Aetna Life Affiliated Companies. Public Relations Department.  
151 Farmington Avenue, Hartford 15, Connecticut.

Almanac Films, Incorporated. 41 Union Square West, New York 13,  
New York.

American Oil Company. 910 South Michigan Avenue, Chicago 80,  
Illinois. (Western States order from Modern)

American Petroleum Institute. 1271 Avenue of the Americas,  
New York 20, New York.

Associate Films, Incorporated. 347 Madison Avenue, New York 17,  
New York.

Bray Studios, Incorporated. 729 Seventh Avenue, New York 36,  
New York.

Briggs and Stratton Corporation. P. O. Box 702, Milwaukee,  
Wisconsin 53201.

Carousel Films, Incorporated. 1501 Broadway, New York 36,  
New York.

Chevrolet Motor Division, General Motors Corporation. Detroit 2,  
Michigan. (Western States order from 405 Montgomery Street  
San Francisco 4, California; New York City and Long Island  
order from 1775 Broadway, New York 19, New York.

Coronet Films. 65 East South Water Street, Chicago 1, Illinois.

Walt Disney Productions. 2400 West Alameda Avenue, Burbank,  
California.

EFB--Encyclopedia Britannica Films, Incorporated. 1150 Wilmette  
Avenue, Wilmette, Illinois.

Federal-Mogul Service. 11031 Shoemaker Avenue, Detroit 13,  
Michigan.

Ford Motor Company. Film Library, 16400 Michigan Avenue,  
Dearborn, Michigan, (Western States order from 4316  
Telegraph Avenue, Oakland 9, California; Eastern States  
order from 16 East 52nd Street, New York 22, New York.)

General Motors Corporation. Department of Public Relations, film section, 3044 West Grand Boulevard, Detroit 2, Michigan. (Western States order from 405 Montgomery Street, San Francisco 4, California; New York City and Long Island order from 1775 Broadway, New York 19, New York.)

Handell Film Corporation. 6926 Melrose Avenue, Los Angeles 38, California.

McGraw-Hill Book Company. Text-Film Department, 330 West 42nd Street, New York 36, New York.

Michigan University. Audio-Visual Education Center, Frieze Building, 720 East Huron Street, Ann Arbor, Michigan.

Modern Talking Picture Service, Incorporated. 3 East 54th Street, New York 22, New York.

National Carbon. 30 East 42nd Street, New York 17, New York.

National Safety Council. 425 North Michigan Avenue, Chicago 11, Illinois.

NF--Norwood Films. 926 New Jersey Avenue, N. W., Washington, 1, D. C.

NET Film Service. Indiana University, Audio-Visual Center, Bloomingdale, Indiana.

Perfect Circle Corporation. South Washington Street, Hagerstown, Indiana.

Pure Oil Company. 35 East Wacker Drive, Chicago 1, Illinois.

Rohm and Haas Company. Redstone Arsenal Research Division, Huntsville, Alabama.

Shell Oil Company. Public Relations Department, 50 West 50th Street, New York 20, New York.

United States Bureau of Mines. Graphic Services Section, 4800 Forbes Street, Pittsburgh 13, Pennsylvania.

## READING

### PURPOSE OF READING

The purpose of the high school reading program is to help each student become as proficient in reading as he is able.

### STRUCTURE OF READING

Reading is a three-year course although all students do not take the advanced reading or Reading III.

Reading I emphasizes the basic skills. It is remedial or corrective in nature for those pupils who are not reading up to their potential. It is a repetition of the developmental reading with a functional approach.

Reading II concerns job related skills. Close team cooperation (with other teachers in the total school program) features in this course to make it meaningful to the pupils involved.

Reading III is an advanced reading course to which students may be promoted from Reading II at any time during the year. Only those students whose reading abilities indicate no need for remedial or corrective reading are assigned to advanced reading. It is primarily designed to extend and refine the skills of comprehension and appreciation.

Some effort is made at all levels to develop appreciation of poems and other literary expressions commensurate with the pupils' abilities.

### OBJECTIVES

The overall objectives of the reading courses are:

- To attain maximum reading proficiency and to use it in all curriculum areas
- To read and use cookbooks, driver training manuals, newspapers, magazines, directories, and catalogs
- To read and follow instructions including those on food packages
- To be able to use reference materials
- To use the library (school and community)
- To broaden one's civic enlightenment
- To extend all types of experiences vicariously

## READING I

### OBJECTIVES OF READING I

- To analyze causative factors for pupils's reading retardation and attempt possible solutions
- To diagnose specific weaknesses for effective instruction
- To develop or reteach the basic reading skills
- To provide functional reading for all students
- To involve pupils in analyses of difficulties and correction of deficiencies and evaluation of results
- To promote, within the realm of pupil's comprehension, enjoyment and appreciation of good reading material
- Suggested Procedures
  - Study all available information on pupil
    - Individual evaluations
    - Cumulative folders for test results, school progress, absences, etc.
    - Personal interviews
    - Interest inventories
    - Autobiographies
    - Sociograms
    - Observation
    - Group discussion
  - Assess pupil's physical condition as it affects reading
    - Visual and auditory acuity
    - Malnutrition--underweight or overweight problems
    - Speech defects
    - Hand preference
    - Personal hygiene
    - Involve necessary professional personnel to correct all possible defects
    - Recognize pupil's self-concept and strive to develop positive attitude toward himself and his environment
    - Give adequate readiness to compensate for a pupil's educational deprivation and experiential background
    - Use diagnostic tests, and informal, to pinpoint reading deficiencies
      - Pointing
      - Word by word reading
      - Head movements
      - Lip movements
      - Regression and phrasing

- Teach or reteach word perception skills
  - Picture clues
  - Sight vocabulary--instant recognition of most frequently used words
  - Context clues
  - Phonetic analysis
  - Structural analysis
  - Dictionary usage
- Teach or reteach comprehension skills
  - Understanding sentence meaning
    - Words have more than one meaning
    - Figures of speech
    - Punctuation changing meaning
    - Prepositional usage over - on - up - down
    - Time-place relationships
    - Cause-effect relationships
    - Getting the main idea
    - Sequence
    - Listening skills
- Teach or reteach study skills
  - Using the parts of a book effectively
  - Organizing and summarizing
  - Classification
  - Skimming and scanning
- Use variety of materials and techniques
  - Revise methods of presenting elementary concepts
  - Rewrite traditional materials--class or individual experience charts
  - Provide attractive, inviting classroom atmosphere
  - Use multi-media approach
    - Films and filmstrips for motivation and building readiness background
    - Recordings for listening, motivating, appreciation, etc.
    - Tape recorder for taped "read alongs", individual evaluation, giving pre-recorded directions for small group or individual lessons
  - Puppets for dramatic role playing, expression, etc.
  - Reading machines for motivation, individualized instruction
    - Tachistiscope
    - Controlled Reader
    - Craig Reader
    - Pacer

- Reading laboratories for specific skills, promoting interest, etc.
- Reading games--commercial and teacher-made for training in specific skills
- Pupil-written stories, newspapers, etc.
- Many books of high interest and low vocabulary
- Self-rating devices for immediate evaluation
  - Reading labs
  - Word analysis cards
  - McCall-Crabb standard test lessons in reading
- Involve pupils in evaluating progress
  - Have pupils keep progress charts of scores, reading rate, etc.
  - Discuss weaknesses and suggest remediation procedures
  - Seek positive ways of encouraging and interesting individuals
  - Promote progress through continuous evaluation
  - Help pupils relate reading to all academic subjects
- Use various types of reading for motivation, promoting appreciation and encouraging togetherness on part of the class
  - Poetry within the realm of the pupil's ability to comprehend
  - Choral readings
  - Plays
  - Riddles, humorous stories

## READING II

### OBJECTIVES OF READING II OR JOB RELATED READING

- To maintain and strengthen skills of Reading I
- To help teach and reinforce vocabularies of other subject areas
- To give experience in job related reading—cookbooks, driver training manuals, newspapers, magazines, telephone directories, catalogs, food packages, etc.
- To broaden pupil's knowledge about certain vocations through related books, biographies, pamphlets, etc.
- To encourage the use of school and public library collections
- To provide opportunities for much functional reading
  - Reading to follow directions
  - Reading to make something
  - Reading to pass a driver's test
  - Reading to find information in newspapers, reference books, telephone directories, etc.
- To help pupils see the relationships of reading to job related offerings in the curriculum
- Suggested procedures
  - Continue diagnostic teaching used in Reading I
  - Secure from teachers in other areas vocabularies for meaningful teaching and reinforcement
  - Devise variety of techniques for vocabulary development
    - Teacher-made word analysis cards
    - Dictionary exercises and games
    - Role playing
    - Riddles, puzzles, cartoons
  - Provide hypothetical situations for purposeful use of cookbooks, driver training manuals, etc.
  - Give free reading time for encouraging wide reading in a chosen area
  - Teach use of school and public libraries as resource centers

## SEWING AND CLOTHING CONSTRUCTION

### INTRODUCTION OF SEWING AND CLOTHING CONSTRUCTION

Homemaking education is an integral part of the total school program with goals and experiences built upon the needs, values and interests of the pupils and their families.

In the instructional program, experiences are provided which offer opportunity for participation in solving personal and family problems in relationship, housing, child care, food, clothing construction, maintenance and laundering.

Emphasis is given to creating and appreciating beauty to working together democratically, to establishing values, to making intelligent choices, to managing time and energy and to developing housekeeping skills.

To make the most effective use of teacher talent and physical facilities, students enrolled in the home economics areas are taught by two teachers. Classes are scheduled on a daily basis. The courses of study in each area are so written that teachers may teach independently, but at the same time reinforce the basic philosophy of home economics.

### GENERAL OBJECTIVES

- To learn to recognize and fulfill responsibilities
- To become more successful in social adjustment
- To create respect for people in authority
- To develop good health habits
- To develop healthier mental attitudes
- To understand the importance of using time and energy wisely
- ~~To help develop in each child a feeling of self confidence~~
- To understand and tolerate differences in people
- To improve good grooming habits such as cleanliness and neatness

## SEWING AND CLOTHING CONSTRUCTION

### PURPOSE OF SEWING AND CLOTHING CONSTRUCTION

This course is concerned with improving, selecting and caring for one's clothing; simple construction processes; and personal grooming. Students do simple alterations, laundering, cleaning and pressing garments. The responsibilities, privileges and benefits of wholesome family living are also stressed.

### STRUCTURE OF SEWING AND CLOTHING CONSTRUCTION

Units and approximate time limits at each level are:

Clothing:	Looking Our Best (30 weeks)
Housing:	Enjoying My Surrounding (4 weeks)
Clothing:	Constructing Clothes (30 weeks)
Housing:	Better Homes for Better Living (4 weeks)
Clothing:	Choosing and Making Clothing; Problems in Clothing (30 weeks)
Housing:	The Livable Home (4 weeks)

During the first year special emphasis is given to personal appearance through the study of grooming. An important phase of the unit is using equipment properly; selection of sewing equipment and easy-to-use patterns.

During the second year further emphasis is given to individual grooming needs and to the development of additional skill in the selection, construction, and care of clothing. Important factors stressed are: good design, becoming color, comfort, durability, suitability, cost and care.

During the third year review and repetition will be given where needed. Emphasis is given to meeting the family's clothing needs through: good management of the clothing budget, greater skill in selection, renovation and construction of clothing for various members of the family, and practices in care of clothing.

The Housing Units emphasize home improvement through orderliness, attractiveness, safety, sanitation and proper management. Repetition will be as needed and extent of unit will depend upon progress and needs of the students.

## COURSE CONTENT

### FIRST YEAR

#### PERSONAL GROOMING

- Objectives

- To develop an interest in improving appearance through the practice of good health habits and good grooming
- To develop a desire to become as personally attractive as possible with a minimum amount of time, energy and money
- To use good habits in caring for one's clothes

- Learning Experiences:

- Discuss why a person should have a good personal appearance.
- From descriptions of people who are admired, determine what part their appearance plays in earning this admiration.
- Demonstrate grooming methods and equipment necessary for developing good personal habits.
- Set up grooming corner where students may practice grooming procedures.
- Demonstrate spot removal, pressing, proper hanging, mending of clothes. Discuss good closet and drawer arrangement.
- Discuss how following points affect personal appearance daily bath, face care, hair care, deodorants, hand and nail care, teeth and feet. When feasible, give demonstrations, display articles, show movies and have class practice.

#### CLOTHING

- Objectives

- To understand one's individual clothing needs in relation to other family members
- To develop some ability to make wise choices in the selection of some ready-made clothing
- To accept the responsibility of working cooperatively with others
- To appreciate the joy and satisfaction that may be gained from making garments

- Learning Experiences

- Demonstrate the fundamentals of using the sewing machine.
- Give students an opportunity to use the machine.
- Whenever student ability warrants, make simple garment developing in each case to degree of capabilities.
- List places to which students go and the clothes they need in order to be well-dressed.
- Have students select pictures of outfits that would be appropriate for different occasions.
- Display a variety of patterns or simple garments suitable for the beginning seamstress.
- Use a pretest to determine knowledge of
  - Inserting a needle in a machine
  - Regulating a stitch
  - General use of machine
  - Use of sewing and pressing equipment
- Plan a way of working cooperatively in the use of time and equipment and in keeping the department neat and clean.
- Demonstrate preparation of material, laying pattern, cutting and marking.
- Give demonstration as needed and follow with individual help on techniques of constructing darts, sleeves, buttons and button-holes, facings, zippers, hems, collars.
- Study the information on pattern envelopes before purchasing fabric and notions.

#### HOUSING: ENJOYING MY SURROUNDINGS

- Objectives

- To develop an appreciation and interest in one's own house
- To be able to understand ways to make a room more attractive
- To develop the understanding of the value of orderliness, cleanliness and safety in the home
- To appreciate attractive home surroundings

- Learning Experiences

- Discuss the difference in meaning of "house and home".
- Discuss the value of each family member having pride and appreciation for his home.
- Discuss characteristics of an attractive home.

- Observe homes in the community and discuss what family members can do to make the outside surroundings attractive and neat.
- Understand the responsibilities of sharing the living space successfully with members of the family.
- Make and carry out plans for caring for personal possessions and those shared with other family members.

## SECOND YEAR

### CONSTRUCTING CLOTHES

#### • Objectives

- To develop further interest in good grooming with emphasis on individual needs
- To improve in caring for and storing clothes
- To maintain good work habits, laboratory management, and safety practices
- To become able to dress well within funds available to all members of the family
- To develop courteous attitudes and good manners as a shopper
- To encourage more skill in clothing construction by working with more difficult patterns, materials, and equipment

#### • Learning Experiences

- Discuss reasons for caring for clothes.
- List major grooming problems of the class and plan for demonstration and practice which will help individuals solve grooming problems.
- Discuss and demonstrate simple repairs that will help to prolong the life of a garment and improve its appearance.
- Make a collection of labels and tags and study the information they contain.
- Discuss the importance of selecting a fabric suitable for the pattern design, pointing out that pattern envelopes list the kinds of fabrics best suited for the pattern.
- Discuss steps in planning before shopping.
- Develop a plan for daily, weekly, and occasional care of clothing.
- Compare garments of good and poor quality.
- Dramatize a shopper making a purchase at a store using good manners, using poor manners.
- Show how basic clothes can be worn for various occasions with a change of accessories.
- List activities of the high school student which require different types of clothes.

## BETTER HOMES FOR BETTER LIVING

### • Objectives

- To be able to understand family housing needs
- To develop an understanding of ways to make the house more attractive and livable
- To be able to make the best use of available space in the present home situation

### • Learning Experiences

- Set up safety check-list of home. Practice good safety measures through home practices.
- Make a list of home accidents and how they can be prevented.
- Make a list of problems which may arise in sharing a room.
- Discuss ways of preventing and solving these problems through cooperative planning for the care of the room.
- Make a list of activities which must be performed daily, those that need to be repeated once a week or more often.
- Observe attractive home surroundings in the community. Describe. Discuss the features which make them attractive.

### THIRD YEAR

#### CLOTHING: CHOOSING AND MAKING CLOTHING ADVANCED PROBLEMS IN CLOTHING

##### • Objectives

- To develop a better understanding of the family's clothing needs and the intelligent use of the income to meet these needs
- To help pupil increase the value of the family's clothing dollar by special care and renovation or alteration of clothing
- To continue the habit of using time energy and equipment wisely in solving individual and family clothing problems
- To develop the ability, to choose ready-to-wear clothing, to get the best value, satisfaction and appearance

##### • Learning Experiences

- Discuss the relationship of grooming and dress to the way a person looks, feels, and acts.
- Discuss and demonstrate where needed equipment and grooming methods for developing good personal habits.
- Demonstrate and discuss pressing equipment.
- Take body measurements to insure correct size pattern.
- Study pattern envelopes for kind and amount of material and notions needed.
- Have each student select a garment to make, restyle or alter for herself or a member of her family which will:
  - Include new problems of construction
  - Involve working with a more difficult fabric which is suitable to the pattern
  - Be within the student's sewing ability
  - Be becoming in design and color
- Discuss the importance of choosing good basic accessories that are appropriate for many occasions. Using pictures or real accessories, demonstrate which accessories:
  - go best together
  - go best with different personalities
  - harmonize with the different types of garments
- Discuss how the following factors affect the clothing needs of the individual family: age, number in family, income, activities, climate, and profession.

- Discuss why clothing expenditures of the various family members may differ
- Show how accessories can be used in a basic wardrobe to help create a smart appearance
- Demonstrate techniques in washing, mending, pressing and ironing the family clothing

## HOUSING: THE LIVABLE HOME

### • Objectives

- To realize that a good home is a community responsibility as well as an individual one
- To help make the home more attractive and safe for the family
- To distinguish between wants and needs
- To create some knowledge of ways to meet housing needs of the family

### • Learning Experiences

- Discuss how the appearance and condition of a house affects property value.
- Discuss each family's responsibility for making the community more attractive and safer.
- List the things in the home which could be improved.
- List reasons why insurance is important.
- List in order of need appliances for own home.

## BIBLIOGRAPHY

### Books for teacher use:

- Beck, Doris M. Custom Tailoring For Homemakers. Bennett, 1964.
- Clayton, Nanalee. Young Living. Bennett, 1963
- Craig, Rush. Homes With Character. Heath and Company, 1962.
- Hoover, Norman K. Approved Practice In Beautifying The Home Grounds. Interstate, 1959.
- Lewis, Burns, Segner. Housing and Home Management. MacMillan Company, 1961.
- Obst, Frances. Art and Design In Home Living. MacMillan Company, 1963.

### Books for student use:

- Reiff, Florence. Steps In Home Living. Bennett, 1964.

Periodicals: American Home Economics Associations  
Home Economics Department  
The Quaker Oats Company  
Merchandise Mart Plaza  
Chicago, Illinois, 600654

Simplicity School Catalog Education Division  
Simplicity Pattern Company, Inc.  
200 Madison Avenue  
New York, New York 10016

McCall Corporation  
230 Park Avenue  
New York, New York

Avon Products  
Educational Services  
605 Third Avenue  
New York, New York 10016

Practical Forecast for Home Economics  
902 Sylvan Avenue  
Englewood Cliffs, New Jersey 07632

What's New In Home Economics  
466 Lexington Avenue  
New York, New York 10017

**Filmstrips:** Sears, Roebuck and Company  
Consumer Information Services  
Department 703 Public Relations  
7401 Skokie Blvd.  
Skokie, Illinois 60076

## SHOP

### PURPOSE OF SHOP

The purpose of this course is:

- To teach the fundamental skills necessary for good workers
- To teach the names used and purposes of the various tools
- To introduce the students to vocational training of skilled crafts

This course is planned in conjunction with a mechanical drawing course.

### STRUCTURE OF SHOP

- Basic Shop - Shop I
- General Construction - Shop II
- Advanced Shop - Shop III

### OBJECTIVES

- To develop motor coordination
- To develop manual dexterity
- To develop good attitudes toward work
- To develop new skills
- To develop good work habits
- To develop self-confidence
- To learn the art of listening and following directions
- To learn cooperation and sharing with others
- To learn the accepting of responsibility

## COURSE CONTENT

### BASIC SHOP - SHOP I

#### UNIT 1

- Safety
- Ruler
- Wood
- Wood joints

#### UNIT 2

- Hand Tools
  - Names
  - Uses
  - Care
- Handtool project
- Finishes and paint

#### UNIT 3

- Electric handtools
- Small Machines
  - Band saw
  - Jig saw
  - Drill press
  - Grinder
- Care and repair of machines

#### UNIT 4

- Small machine project

#### UNIT 5

- Wood lathe

## GENERAL CONSTRUCTION - SHOP II

### UNIT 1

- History of the building industry
- Field trip
- Floor plans

### UNIT 2

- The different parts of a building
- Cutting of lumber for a model house

### UNIT 3

- Building a model house

### UNIT 4

- The role of maintenance of buildings
- The different skills needed
- Maintenance around building
- Field trips

## ADVANCED SHOP - SHOP III

### UNIT 1

- Hand tools
- Machine tools

### UNIT 2

- Large project

### UNIT 3

- History of mass production
- Direct line assembly
- Choosing of project(s) to be mass produced

### UNIT 4

- Projects mass produced
- Projects finished

### UNIT 5

- Distribution of product(s)
- Field trip

## BIBLIOGRAPHY

Durbahn, Walter E. Fundamentals of Carpentry. American Technical Society, 1966.

Durbahn, Walter E. Fundamentals of Carpentry Volume 2. American Technical Society, 1966.

Hammond, James J. Woodworking Technology. McKnight & McKnight Publishing, 1966.

Hunt, DeWitt. Hand Wookworking. Harlow Publishing Corporation, 1962.

## SOCIAL COMPETENCE

### PURPOSE OF SOCIAL COMPETENCE

Social Competence is designed as a one-year course.

The purpose of this course is to create within each student a sense of self-confidence as he makes a place for himself in today's society.

### COURSE CONTENT

#### UNDERSTANDING YOURSELF

- Objectives
  - To develop a better understanding of human behavior
  - To develop the ability to cope with everyday problems and emotions
  - To develop the ability to live in society as a useful citizen
  - To develop the ability to get along with family, friends and peers
- Content Outline
  - Vocabulary
    - conscience
    - emotion
    - environment
    - heredity
    - instinct
    - personality
    - relationship
    - society
  - Why we behave as we do
    - The nature of our bodies
      - The brain
      - The five senses
  - Experiences with
    - Family
    - Teachers
    - Friends
    - Classmates

- Heredity and environment
  - Traits inherited from parents
  - Early years with parents influence personality
  - Children learn to love by being loved
- Choosing behavior
  - Your behavior equals - you
  - No one can MAKE you misbehave - YOU are responsible
  - Unhappiness is caused from misbehavior
- Reasons for misbehavior
  - Ladies undergo physical changes
  - The craving of attention
  - The tendency to cling to childish feelings and attitudes
- Changing behavior
  - Talk about troubles
  - Face problems
    - About school
    - About self
    - About future
    - About home and family
    - About health
- Learn to control temper and emotions

#### ETIQUETTE: A COMBINATION OF STRICT RULES AND EASY GOOD MANNERS

- Objectives
  - To develop proper attitudes, courtesy toward and respect for members of family
  - To learn to share responsibility in the home and in school
  - To learn and practice good manners in the home, in school, in church and in public
  - To recognize the importance of good grooming and proper dress
- Course Content
  - Vocabulary
    - borrow
    - chore
    - congenial
    - considerate
    - control
    - curfew
    - distinctly
    - manners
    - monopolize
    - obedient
    - respect
    - responsibility

- Manners in the home
  - Respect the privacy of family members
    - Knock before entering a closed door.
    - Read only mail addressed to you.
- Control moods
  - By working
  - By playing
  - By keeping busy
  - Shedding tears in private
- Be considerate and thoughtful
  - Share in home tasks.
  - Respect authority.
  - Respect a curfew.
  - Cooperate in family duties and responsibilities.
  - Help with finances (if possible).
- Develop habit of personal appearance and body care
  - Bathe regularly (use of deodorant).
  - Keep clothes clean and change often.
  - Care of teeth
    - Brush regularly.
    - Visit dentist regularly.
  - Care of hair
    - Comb regularly.
    - Shampoo regularly.
  - Care of eyes
    - Regular examinations.
    - Use of glasses (if needed).
  - Toilet habits
    - Flush after using.
    - Wash hands after use.
  - Eat balanced meals.
  - Have medical check-ups regularly.
- Develop proper telephone manners (this is done in correlation with the language classes)
  - Answer phone promptly and identify yourself.
  - Speak slowly and distinctly.
  - Keep voice friendly even for wrong numbers.
  - Take messages accurately.
  - Keep conversation short.
- Learn and practice proper table manners
  - Go to a meal promptly.
  - Learn proper table setting
  - Eat foods with proper utensils.
  - Learn when and where to sit at the table.

- Learn the facts of good grooming
  - Select clothes that go well together.
  - Buy clothes that can be worn for more than one occasion.
  - Select clothes that are suited to figure and coloring.
  - Buy only clothes that are needed.
  - Select clothes that will wear well and will be easy to care for.

## JOB TRAINING

- Objectives
  - To acquaint the student with various kinds of jobs
  - To teach the student how and where to look for a job and where he might get help in finding one
  - To teach a student how to apply for a job
  - To teach a student how to be a good worker
- Content Outline
  - Vocabulary
 

• agency	• interview
• apply	• manager
• apply in person	• minor
• apprentice	• permanent
• assistant	• receptionist
• employ	• reliable
• employee	• salary
• employer	• temporary
• fringe benefits	• trainee
• good reference	• union
  - Getting a job
    - Employment agency
      - Visit agency
      - Fill out application
      - Interview
    - Newspaper advertisements
      - Classified advertisements
      - Help wanted
      - Situation wanted
    - Jobs through friends
    - Rehabilitation counselor
      - Contact
      - Procedures
  - Applying for a job
    - Telephone interviews
      - Finding number
      - Telephone numbers

- . Information wanted
  - . Make appointments
- . Personal interview
  - . Be on time.
  - . Sit down when asked to sit down.
  - . No smoking unless cigarette is offered.
  - . Always say "Yes Sir" and "No Sir".
  - . Find out about wages.
  - . Working hours.
  - . Fringe benefits.
- . Job application
  - . Filling out application blanks
    - . Know information
    - . Full name
    - . Address
    - . Age
    - . Social Security number
    - . References
    - . Past job experiences
  - . Employee rights and privileges
    - . Sick leave
    - . Vacation
    - . Holidays
    - . Working hours
- . Getting along with the boss
  - . Follow directions.
  - . Report problems.
  - . Notification of absence.
  - . Always be prompt.
  - . Observe rules set by employer.
- . Getting along with co-workers
  - . Respect and tolerance.
  - . Show responsibility.
  - . Discuss problems.
  - . Be honest.
- . Leaving a job
  - . Resigning
  - . Leave with a good name.
  - . Leave forwarding address.
  - . Turn in supplies.

## SUGGESTED TEACHING MATERIALS

English, O. Spurgeon, M.D. and Foster, Constance J. Your Behavior Problems. S.R.A. Guidance Services. Chicago, Illinois, 1952.

Landis, Paul H. Social Living. Ginn and Company, 1951.

Menniger, William C., M.D. Understanding Yourself. S.R.A. Guidance Services. Chicago, Illinois.

Reiff, Florence M. Steps in Home Living. Charles A. Bennett Company, Incorporated. Peoria, Illinois, 1966.

Vanderbilt, Amy. New Complete Book of Etiquette. Doubleday and Company, Incorporated. Garden City, New York, 1963.

### Film Strips:

Stanley Bowmar Company, Incorporated, Valhalle, New York  
Teen Etiquette Series

Table Manners

Dining Out

Dating

Grooming and Posture

At Home and in Public

At School

Clothes

A Better You Series

Popularity Comes to You

### Job Training:

Randall, Florence. Getting A Job. Fearon Publishers. Palo Alto, California.

Pope, Harold. Where to Work in Winston-Salem. Central School, Winston-Salem, North Carolina

Eye Gate House, Incorporated, 146-01 Archer Avenue, Jamaica 35, New York, 117 - Occupational Education

The Job Interview

Stocker in A Super-Market

The Waitress

Fixing a Flat Tire

How to Use Your Checkbook

The Variety Store

The School Cafeteria Worker

The Gas Station Attendant

## TYPEWRITING I

### STRUCTURE OF TYPEWRITING I

Typewriting I is a one-year course. Although, it may be taught at any level of the senior high school, students who plan to pursue a business-concentrated program of study should take typewriting in the tenth year. Students enrolling in typing should have a mental age of at least nine years.

This course is designed to give students training in learning touch typing, with a reasonable amount of speed and accuracy. Training is also given in such areas as centering, typing of personal and business letters using the blocked and semiblocked letter styles, envelopes, outlines and one-page manuscripts.

### OBJECTIVES

- To teach parts of the machine and the correct technique in manipulating them
- To teach the correct technique of writing at the machine
- To teach the entire keyboard and how to make special characters which are not on the machine
- To teach pupils how to take care of the machine, how to change a ribbon
- To develop a responsible attitude toward starting work promptly, working steadily, and following directions
- To develop knowledge of the correct forms of spacing
- To teach pupils how to center horizontally and vertically
- To teach pupils how to type a one-page manuscript and an outline
- To teach pupils the blocked and semiblocked letter styles and give practice in setting up many letters following this form so that pupils can turn out mailable letters
- To teach pupils the art of erasing and how to address envelopes properly, to fold letters and insert in envelopes
- To develop the ability to proofread their own work
- To develop work habits that will produce usable copies of all typewritten materials
- To develop a degree of accuracy in speed in writing commensurate with the physical and mental make-up of the pupils

## SUGGESTED COURSE CONTENT

### INTRODUCING THE TYPEWRITER

- Basic parts
- Margin settings
- Posture
- Keyboard - letters
- Care of the typewriter
- Reporting necessary repairs
- Number keys

### CENTERING

- Horizontal centering
- Vertical centering
- Spread centering

### SPECIAL TECHNIQUES

- Indenting
- Placement of paragraphs
- Word-division
- Characters not on the keyboard
- Spacing with punctuation
- Changing typewriter ribbon

### REPORTS

- Exact copies: enumerations
- Outlines
- One-page reports

### CORRESPONDENCE

- Short personal letters
- Personal-business letters
- Proofreading
- Making corrections
- Envelopes
- Folding for insertion into envelope
- Unarranged letters

## TYPEWRITING II

### STRUCTURE OF TYPEWRITING II

Typewriting II is a one-year course. It should be taught at the eleventh year level and should be required for students who are working toward a certificate in general office or as a clerk-typist. Students should have successfully completed Typing I before enrolling in Typing II.

The purpose of this course is further typewriting skill development. This purpose may be achieved through lessons, demonstrations, application of typewriting skill to problems of centering, letterwriting, tabulation, and the typing of reports, simple records and forms.

### OBJECTIVES

- To further develop accuracy and speed
- To develop a responsible attitude toward starting work promptly, working steadily, and following directions
- To take up all important letter forms and give practice in setting up many letters following each form so that pupils can turn out mailable letters
- To teach pupils how to make carbon copies, the art of erasing, and how to address envelopes properly; fold letters, insert enclosures, seal and stamp
- To teach pupils to proofread and to make corrections neatly, and evaluate their own work
- To present the duplicator and mimeograph and give sufficient practice in typing masters and stencils for each machine
- To develop the ability to do kinds of tabulating work, typing of invoices and other business forms

## SUGGESTED COURSE CONTENT

### TECHNIQUE EVALUATION AND SKILL INVENTORY

- Refresher drills
- Posture checkup
- Hand position
- Foot position
- Accuracy drills

### CORRESPONDENCE

- Explanation, illustration, and practice on all letter styles
- Punctuation styles
- Letter placement
- Proofreading
- Making corrections
- Envelopes
- Submitting letters for signature
- Folding for insertion into envelope
- Special letter parts
- Letters with table, PS
- Letter with quotation
- Letter with enumeration
- Unarranged letters

### SPECIAL TECHNIQUES

- Typing on lines
- Typing insertions
- Crowding letters
- Spreading letters

### PRINTED FORMS

- Interoffice memorandums
- Index cards
- Invoices: credit memos
- Statement of account

### COPYING AND DUPLICATING (See Business Practice III)

- Typing mimeograph stencils
- Typing duplicator masters
- Typing multilith masters
- Typing copy for photo reproduction

### TABULATION

- Two-column tables
- Three-column tables
- Four-column tables
- Ruled tables

## TYPEWRITING III

### STRUCTURE OF TYPEWRITING III

Typing III is a one-year course. It should be taught at the twelfth year and should be required of students who are working toward a certificate in general office or as a clerk typist. Students should have successfully completed Typing II before enrolling in Typing III.

The purpose of this course is typewriting skill development to the point of the individual student's maximum ability. This purpose may be achieved through instruction and drill in speed and accuracy development, and application of typewriting skill to office-type problems. The speed goal is 45 wpm or higher, but accuracy is emphasized rather than speed.

### OBJECTIVES

- To further increase accuracy and speed
- To give many projects which will test the pupil's initiative, resourcefulness and judgment
- To produce work of acceptable quantity and quality that meets the requirements for an initial job employment in business
- To develop a responsible attitude toward starting work promptly, working steadily and holding to high standards of performance
- To teach office etiquette, proper dress, and the correct attitude toward superiors and fellow workers

## SUGGESTED COURSE CONTENT

### SKILL INVENTORY

- Refresher drills
- Accuracy drills
- Centering recalls
- Review of outlines and reports
- Review of business letters
- Review of tabulation
- Review of business forms
- Rough drafts

### CORRESPONDENCE

- Unarranged letters
- Envelopes
- Proofreading
- Making corrections
- Letters with attention line
- Letters with subject line
- Two-page letters
- Copying of "incoming letter"

### FORMS

- Index cards - mailing list
- Typing folder labels
- Fill-in form letters
- Postal cards - typing form messages
- Fill-in postal cards
- Typing manuals, booklets, reports, etc. for printing

### GETTING AND KEEPING A JOB AS A TYPIST

- Office etiquette
- Proper dress
- Applying for a job - letter of application, application blank
- Interview
- Employment test
- The job

### SKILL DRIVE

- Speed - development drills
- Sustained drills
- Technique drills
- Accuracy drills

## BIBLIOGRAPHY

### Books:

Lessenberry, D. D.; Crawford, T. James; Erickson, Lawrence W. 20th Century Typewriting. Ninth Edition. Cincinnati, Ohio: South-Western Publishing Company, 1967.

Liguori, Frank E. Basic Typewriting Operations Principles and Problems. Cincinnati, Ohio: South-Western Publishing Company, 1965.

Lloyd, Alan C.; Rowe, John L.; Winger, Fred E. Typing Power Drills. Second Edition. New York: McGraw-Hill Book Company, 1965.

Rowe, John L.; Etier, Faborn. Typewriting Drills For Speed And Accuracy. New York: McGraw-Hill Book Company, 1965.

Rowe, John L.; Lloyd, Alan C.; Winger, Fred E. Book One, General Typing. New York: McGraw-Hill Book Company, 1962.

Rowe, John L.; Lloyd, Alan C.; Winger, Fred E. Book Two, Office Production Typing. New York: McGraw-Hill Book Company, 1963.

### Records and Filmstrips:

"Better Posture-Better Typing" (Record 1-Side B, No. 46502)  
McGraw Hill Book Company. New York.

"Fundamental Typing Habits", (Record 2-Side A, No. 46503)  
McGraw-Hill Book Company. New York.

"How Typing is Learned and Why", (Record 1-Side A, No. 46501)  
McGraw-Hill Book Company. New York.

"Getting The Typewriter Ready", Part 1 (Record 3-Side A, No. 46505)  
McGraw-Hill Book Company. New York.

"Getting The Typewriter Ready", Part 2 (Record 3-Side B, No. 46506)  
McGraw-Hill Book Company. New York.

"Remedial Typing Techniques", (Record 2-Side B, No. 46504)  
McGraw-Hill Book Company. New York.

Records and Filmstrips:

"Basic Display Typing: Methods and Shortcuts - 1", (Record 1-  
Side A, No. 646511) McGraw-Hill Book Company. New York.

"Basic Display Typing: Methods and Shortcuts - II", (Record 1-  
Side B, No. 646512) McGraw-Hill Book Company. New York.

"Basic Display Typing: Principles and Patterns", (Record 2-  
Side A, No. 646513) McGraw-Hill Book Company. New York.

"Forms Typing", (Record 4 - Side A, No. 646517) McGraw-Hill  
Book Company. New York.

"Letter Typing, Part I", (Record 3 - Side A, No. 646515)  
McGraw-Hill Book Company. New York.

"Letter Typing, Part II", (Record 3 - Side B, No. 646516)  
McGraw-Hill Book Company. New York.

"Manuscript Typing", (Record 2 - Side B, No. 646514) McGraw-  
Hill Book Company. New York.

"Tabulation Typing", (Record 4 - Side B, No. 646518) McGraw-  
Hill Book Company. New York.